

GenCore version 5.1.6
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OM protein - protein search, using sw model

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Run on: February 14, 2005, 15:17:38 ; Search time 43 Seconds
        (without alignments)
        1131.888 Million cell upd
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Title: US-10-614-076-98

Perfect score:

Sequence: 1 MNPNNRSEHDTIKVTPNSEL.....SFVSNKIIYIDKIEFIPVQL 652

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 200000000
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 150 summaries

Database : Issued Patents AA: *

1: /cgn2 6/ptodata/1/iaa/5A COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/6B_COMB.per:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pcp:*

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6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query		DB	ID	Description
		Match	Length			
1	3406	100.0	652	3	US-08-996-441B-98	Sequence 98, Appl
2	3406	100.0	652	3	US-08-996-441B-111	Sequence 111, App
3	3406	100.0	652	3	US-08-993-722A-98	Sequence 98, Appl
4	3406	100.0	652	3	US-08-993-722A-111	Sequence 111, App
5	3406	100.0	652	3	US-08-993-170A-98	Sequence 98, Appl
6	3406	100.0	652	3	US-08-993-170A-111	Sequence 111, App
7	3406	100.0	652	3	US-08-993-775B-98	Sequence 98, Appl
8	3406	100.0	652	3	US-08-993-775B-111	Sequence 111, App
9	3406	100.0	652	4	US-09-377-466B-2	Sequence 2, Appl
10	3406	100.0	652	4	US-09-427-770-98	Sequence 98, Appl
11	3406	100.0	652	4	US-09-427-770-111	Sequence 111, App
12	3406	100.0	652	4	US-09-427-769-98	Sequence 98, Appl
13	3406	100.0	652	4	US-09-427-769-111	Sequence 111, App
14	3406	100.0	652	6	5187091-2	Patent No. 5187091
15	3406	100.0	652	6	5187091-2	Patent No. 5187091
16	3402	99.9	652	3	US-08-996-441B-68	Sequence 68, Appl
17	3402	99.9	652	3	US-08-993-722A-68	Sequence 68, Appl
18	3402	99.9	652	3	US-08-993-170A-68	Sequence 68, Appl
19	3402	99.9	652	3	US-08-993-775B-68	Sequence 68, Appl
20	3402	99.9	652	4	US-09-427-770-68	Sequence 68, Appl
21	3402	99.9	652	4	US-09-427-769-68	Sequence 68, Appl
22	3401	99.9	652	3	US-08-996-441B-14	Sequence 14, Appl
23	3401	99.9	652	3	US-08-993-722A-14	Sequence 14, Appl
24	3401	99.9	652	3	US-08-993-170A-14	Sequence 14, Appl
25	3401	99.9	652	3	US-08-993-775B-14	Sequence 14, Appl
26	3401	99.9	652	4	US-09-377-466B-6	Sequence 6, Appl
27	3401	99.9	652	4	US-09-427-770-14	Sequence 14, Appl

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STREET: P.O. Box 433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/996,441B
FILING DATE: 18-DEC-1997
CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:151
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 98:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-996-441B-98

Query Match      100.0%; Score 3406; DB 3; Length 652;
Best Local Similarity 100.0%; Pred. No. 6e-287;
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  MNPNRSEHDTIKVTNSELOTNHNOYPLADPNSTLEELNYKEFLRMTEDSSTVELDNS 60
DB      1  MNPNRSEHDTIKVTNSELOTNHNOYPLADPNSTLEELNYKEFLRMTEDSSTVELDNS 60

QY      61  TVKDVGTVGISVVGQILGVGVVPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120
DB      61  TVKDVGTVGISVVGQILGVGVVPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120

QY      121  KIEYAKSKALAELOGIQNNFEDYVNALNSWKKTPLSLRSKSODRIRELFSQAESHFRN 180
DB      121  KIEYAKSKALAELOGIQNNFEDYVNALNSWKKTPLSLRSKSODRIRELFSQAESHFRN 180

QY      181  SMPFAYSKKEVLFLPTYAQAANTHLLKDAQVFGBEWGYSSYSEDVAEFYHRQLKLTQQY 240
DB      181  SMPFAYSKKEVLFLPTYAQAANTHLLKDAQVFGBEWGYSSYSEDVAEFYHRQLKLTQQY 240

QY      241  TDHCVNMYNGLNGLRGTSYDAWKFNRFREMTLTVDLILVFPFYDILRLYSGVKTEL 300
DB      241  TDHCVNMYNGLNGLRGTSYDAWKFNRFREMTLTVDLILVFPFYDILRLYSGVKTEL 300

QY      301  TRDIFTDPIFSLNTLOEGYPTFLSIENSIRKPHLFDYLOGIEFHTRLPQGYFGKDSFNW 360
DB      301  TRDIFTDPIFSLNTLOEGYPTFLSIENSIRKPHLFDYLOGIEFHTRLPQGYFGKDSFNW 360

QY      361  SGNVYETRPSIGSSKTIITSPYIGKSTPEPVOKLSFDGQKVTRTANTDVAAPNGKVTLG 420
DB      361  SGNVYETRPSIGSSKTIITSPYIGKSTPEPVOKLSFDGQKVTRTANTDVAAPNGKVTLG 420

QY      421  VTKVDFSQYDDQKNETSTQTVDSKRNNGHVSAQSDIDQLPETTDEPLEKAYSHQLNAYE 480
DB      421  VTKVDFSQYDDQKNETSTQTVDSKRNNGHVSAQSDIDQLPETTDEPLEKAYSHQLNAYE 480

QY      481  CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540
DB      481  CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540

QY      541  LFLKSSNSIAKPKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600
DB      541  LFLKSSNSIAKPKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600

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106	393	99.6	652	4	US-09-427-769-66
107	392	99.6	652	3	US-08-996-441B-30
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115	392	99.6	652	3	US-08-993-775B-30
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131	390	99.5	652	3	US-08-993-170A-40
132	390	99.5	652	3	US-08-993-775B-16
133	390	99.5	652	3	US-08-993-775B-18
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139	390	99.5	652	4	US-09-427-769-18
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145	389	99.5	652	3	US-08-993-775B-4
146	389	99.5	652	4	US-09-427-770-4
147	389	99.5	652	4	US-09-427-769-4
148	389	99.5	652	4	US-08-996-441B-52
149	387.5	99.5	651	3	US-08-993-722A-52

ALIGNMENTS

RESULT 1	
US-08-996-441B-98	
; Sequence 98, Application US/08996441B	
; Patent No. 6023013	
; GENERAL INFORMATION:	
; APPLICANT: English, Leigh H.	
; APPLICANT: Brussock, Susan M.	
; APPLICANT: Malvar, Thomas M.	
; APPLICANT: Bryson, James W.	
; APPLICANT: Kulesza, Caroline A.	
; APPLICANT: Walters, Frederick S.	
; APPLICANT: Statin, Stephen L.	
; APPLICANT: Von Tersch, Michael A.	
; APPLICANT: Romano, Charles	
; TITLE OF INVENTION: INSECT-RESISTANT TRANSGENIC PLANTS	
; NUMBER OF SEQUENCES: 113	
; CORRESPONDENCE ADDRESS:	
; ADDRESSEE: arnold, white & Durkee	

QY 601 DDLTYQTFDLATNSNMGSGDKNELIIGAESFVSNKIIYIDKIBFIPVOL 652
Db 601 DDLTYQTFDLATNSNMGSGDKNELIIGAESFVSNKIIYIDKIBFIPVOL 652

RESULT 2

US-08-996-441B-111
; Sequence 111, Application US/08996441B
; Patent No. 6023013
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: INSECT-RESISTANT TRANSGENIC PLANTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/996,441B
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:151
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 111:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
US-08-996-441B-111

Query Match 100.0%; Score 3406; DB 3; Length 652;
Best Local Similarity 100.0%; Pred. No. 6a-287;
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MNPNNRSEHDTIKVTNSELQTHNNOYPLADNPNSTLEELNYKEFLRMTEDSSSTEVLDS 60
Db 1 MNPNNRSEHDTIKVTNSELQTHNNOYPLADNPNSTLEELNYKEFLRMTEDSSSTEVLDS 60
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Db 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRIELFSQAESHFRN 180
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Db 181 SMPSPFAVSKFEVLFLPTYAQAANTHLLLLKDAQVFGEEWGYSEDVAEFVHROLKLTQQY 240
QY 241 TDHCNVNMYNVLNGLRGSTYDAWVKFNRRREMTLTVDLIVLFPFYDIRLSKGVKTEL 300

Db 241 TDHCNVNMYNVLNGLRGSTYDAWVKFNRRREMTLTVDLIVLFPFYDIRLSKGVKTEL 300
QY 301 TRDIFTDPIFSLNTLOEYGTFLSIENSRKPHLFDYLOGIEFHTRLOPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGTFLSIENSRKPHLFDYLOGIEFHTRLOPGYFGKDSFNW 360
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Db 361 SGNVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAPNGKVYLG 420
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Db 421 VTKVDFSDYDDQKNETSTOTYDSKRNNGHVSAQDSIDQLPPETTDSPLEKAYSHQLNAYE 480
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Db 541 LFLKSSNSIAKFKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
QY 601 DDLTYQTFDLATNSNMGSGDKNELIIGAESFVSNKIIYIDKIBFIPVOL 652
Db 601 DDLTYQTFDLATNSNMGSGDKNELIIGAESFVSNKIIYIDKIBFIPVOL 652

RESULT 3
US-08-993-722A-98
; Sequence 98, Application US/08993722A
; Patent No. 6060594
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,722A
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 98:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear

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; MOLECULE TYPE: protein
; US-08-993-722A-98
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,722A
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 111:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear
; US-08-993-722A-111
;
; Query Match 100.0%; Score 3406; DB 3; Length 652;
; Best Local Similarity 100.0%; Pred. No. 6e-287;
; Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
;
; QY 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPSTLEELNYKEFLRMTEDSSTEVLDNS 60
; DB 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPSTLEELNYKEFLRMTEDSSTEVLDNS 60
;
; QY 61 TVKDAVGTGIVGVGQILGVGVVPEAGALTSPYQSFPLNTIWPSSDADPWKAFMAQVEVLIDK 120
; DB 61 TVKDAVGTGIVGVGQILGVGVVPEAGALTSPYQSFPLNTIWPSSDADPWKAFMAQVEVLIDK 120
;
; QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN 180
; DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN 180
;
; QY 181 SMPFSAVSKFEVLFLPTYAQAANTHLLKDAQVGEWGYSSDVAEFYHRQLKLTQY 240
; DB 181 SMPFSAVSKFEVLFLPTYAQAANTHLLKDAQVGEWGYSSDVAEFYHRQLKLTQY 240
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; QY 241 TDHCVNMYNGLNGLRGSTYDAWVKFNPRFRMTLTVDLVLVLPFYDIRLYSGVKTEL 300
; DB 241 TDHCVNMYNGLNGLRGSTYDAWVKFNPRFRMTLTVDLVLVLPFYDIRLYSGVKTEL 300
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; QY 301 TRDIFTDPIFSLNTLOEYGTPTLSIENSRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW 360
; DB 301 TRDIFTDPIFSLNTLOEYGTPTLSIENSRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW 360
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; QY 361 SGNVYETPSIGSSKTIITSPYGDKSTPEVQKLSFDGQKVYRTIANTDVAAMPNGKVYL 420
; DB 361 SGNVYETPSIGSSKTIITSPYGDKSTPEVQKLSFDGQKVYRTIANTDVAAMPNGKVYL 420
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; QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSQAQSDIDQLPETTDEPLEKAYSHQNLV 480
; DB 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSQAQSDIDQLPETTDEPLEKAYSHQNLV 480
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; QY 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIEEGPFTGGNL 540
; DB 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIEEGPFTGGNL 540
;
; QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTNLRFLVQNSNNDPLVIYINKTMNK 600
; DB 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTNLRFLVQNSNNDPLVIYINKTMNK 600
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; QY 601 DDLTYQTQFDLATTSNMGFGSKNELIIGAESFVSNEKIYIDKIEFIPVQL 652
; DB 601 DDLTYQTQFDLATTSNMGFGSKNELIIGAESFVSNEKIYIDKIEFIPVQL 652
;
; RESULT 4
; US-08-993-722A-111
; Sequence 111, Application US/08993722A
; Patent No. 6060594
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston

```

Db 601 DDDLTYQTFLATTNSNMGSFGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 5

US-08-993-170A-98
; Sequence 98, Application US/08993170A
; Patent No. 6063597

; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.

; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas W.

; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.

; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.

; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO

; TITLE OF INVENTION: COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 113

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee

; STREET: P. O. Box 4433
; CITY: Houston

; STATE: Texas
; COUNTRY: USA

; ZIP: 77210
; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,170A

; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.

; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:002

; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577

; INFORMATION FOR SEQ ID NO: 98:
; SEQUENCE CHARACTERISTICS:

; LENGTH: 652 amino acids
; TYPE: amino acid

; TOPOLOGY: linear
; MOLECULE TYPE: protein

; US-08-993-170A-98

Query Match 100.0%; Score 3406; DB 3; Length 652;
Best Local Similarity 100.0%; Pred. No. 6e-287;

Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTNSELQTNHNOYPLADNPNSTLEELNYKEFLRMTEDSSTEVLNLS 60

Db 1 MNPNNRSEHDTIKVTNSELQTNHNOYPLADNPNSTLEELNYKEFLRMTEDSSTEVLNLS 60

Qy 61 TVKDAVGTGISVVGQILGVGVFPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120

Db 61 TVKDAVGTGISVVGQILGVGVFPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120

Qy 121 KIEEYAKSKALAELOQLQNNFEDYVVALNSWKKTPLSLRSKRSQDRIRLEFSQAESHFRN 180

Db 121 KIEEYAKSKALAELOQLQNNFEDYVVALNSWKKTPLSLRSKRSQDRIRLEFSQAESHFRN 180

Qy 181 SMPSPAVSKFEVLFLPTYAAQANTHLLKDAQVFGEEGYSSEDAEFYHRLKLTQY 240

Db 181 SMPSPAVSKFEVLFLPTYAAQANTHLLKDAQVFGEEGYSSEDAEFYHRLKLTQY 240

Qy 241 TDHCVNWNVYVGLNGLRGTYDAWKNNFRFRREMTLVLDLIVLPFPYDIRLYSKGVKTEL 300

Db 241 TDHCVNWNVYVGLNGLRGTYDAWKNNFRFRREMTLVLDLIVLPFPYDIRLYSKGVKTEL 300

Qy 301 TRDIFTDPIFSLNTLOEYGTPTFLSIENSIRKPHLEFDYLOGIEPHTRLOPGVFGKDSFNYW 360

Db 301 TRDIFTDPIFSLNTLOEYGTPTFLSIENSIRKPHLEFDYLOGIEPHTRLOPGVFGKDSFNYW 360

Qy 361 SGNVETRPSIGSSKITITSPPFYGDKSTPEVQKLSFDGQKVYRTIANTDVAAMPNGKYVLG 420

Db 361 SGNVETRPSIGSSKITITSPPFYGDKSTPEVQKLSFDGQKVYRTIANTDVAAMPNGKYVLG 420

Qy 421 VTKVDFESQYDDQKNETSTQTYDSKRNGHVSQAQSDIDQLPPETDDEPLEKAYSHQLNYAE 480

Db 421 VTKVDFESQYDDQKNETSTQTYDSKRNGHVSQAQSDIDQLPPETDDEPLEKAYSHQLNYAE 480

Qy 481 CFLMQRRTGTIPFTTWTTHRSVDFNTIDAEKITQLPVKAYALSSGASIIIEGFGFTGNNL 540

Db 481 CFLMQRRTGTIPFTTWTTHRSVDFNTIDAEKITQLPVKAYALSSGASIIIEGFGFTGNNL 540

Qy 541 LFLKSSNSIAKPKVTLSAALLQRYVRIRYASTTNLRLFVQNSNNDPLVIYINKTMNK 600

Db 541 LFLKSSNSIAKPKVTLSAALLQRYVRIRYASTTNLRLFVQNSNNDPLVIYINKTMNK 600

Qy 601 DDDLTYQTFLATTNSNMGSFGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

Db 601 DDDLTYQTFLATTNSNMGSFGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 6

US-08-993-170A-111
; Sequence 111, Application US/08993170A
; Patent No. 6063597

; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.

; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas W.

; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.

; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.

; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO

; TITLE OF INVENTION: COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 113

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee

; STREET: P. O. Box 4433
; CITY: Houston

; STATE: Texas
; COUNTRY: USA

; ZIP: 77210
; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,170A

; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 424

; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.

; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:002

; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000

; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 111:

; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids

; TYPE: amino acid
; STRANDEDNESS:

; TOPOLOGY: linear
; US-08-993-170A-111

Query Match		100.0%; Score 3406; DB 3; Length 652;	
Best Local Similarity		100.0%; Pred. No. 6e-287;	
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
Qy	1	MNPNRSEHDTIKVTPNSELOTHNOYPLADNPSTLEELNYKEFLRMTESSTEVLNDS 60	
Db	1	MNPNRSEHDTIKVTPNSELOTHNOYPLADNPSTLEELNYKEFLRMTESSTEVLNDS 60	
Qy	61	TVKDAVGTSVVGQILGVGVPFAGALTSFYQSFINTIPSDADPWKAFMAQVEVLIDK 120	
Db	61	TVKDAVGTSVVGQILGVGVPFAGALTSFYQSFINTIPSDADPWKAFMAQVEVLIDK 120	
Qy	121	KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELSQAESHFRN 180	
Db	121	KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELSQAESHFRN 180	
Qy	181	SNPSFAVSKEFVFLFTYQAANTHLLLDKAOVGEWGYSSDVAEFYHRLKLTQOY 240	
Db	181	SNPSFAVSKEFVFLFTYQAANTHLLLDKAOVGEWGYSSDVAEFYHRLKLTQOY 240	
Qy	241	TDHCNVNWNVGLRGSTYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300	
Db	241	TDHCNVNWNVGLRGSTYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300	
Qy	301	TRDIFTDPIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOGIEFHTRLOPGYFGKDSFNW 360	
Db	301	TRDIFTDPIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOGIEFHTRLOPGYFGKDSFNW 360	
Qy	361	SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYL 420	
Db	361	SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYL 420	
Qy	421	VTKVDFSOYDDOKNETSTQYDSKRNGHVSQAQDSIDQLPPTTDEPLEKAYSHQNLV 480	
Db	421	VTKVDFSOYDDOKNETSTQYDSKRNGHVSQAQDSIDQLPPTTDEPLEKAYSHQNLV 480	
Qy	481	CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540	
Db	481	CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540	
Qy	541	LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMK 600	
Db	541	LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMK 600	
Qy	601	DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652	
Db	601	DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652	
RESULT 7			
US-08-993-775B-98			
; Sequence 98, Application US/08993775B			
; Patent No. 6077824			
; GENERAL INFORMATION:			
; APPLICANT: English, Leigh H.			
; APPLICANT: Brussock, Susan M.			
; APPLICANT: Malvar, Thomas M.			
; APPLICANT: Bryson, James W.			
; APPLICANT: Kulesza, Caroline A.			
; APPLICANT: Walters, Frederick S.			
; APPLICANT: Slatin, Stephen L.			
; APPLICANT: Von Tersch, Michael A.			
; TITLE OF INVENTION: METHODS FOR IMPROVING THE ACTIVITY OF			
; NUMBER OF INVENTION: DELTA-ENDOTOXINS AGAINST INSECT PESTS			
; NUMBER OF SEQUENCES: 113			
; CORRESPONDENCE ADDRESS:			
; ADDRESS: Arnold, White & Durkee			
; STREET: P. O. Box 4433			
; CITY: Houston			
; STATE: Texas			
; COUNTRY: USA			
; ZIP: 77210			
; COMPUTER READABLE FORM:			
; RESULT 8			

MEDIUM TYPE: Floppy disk			
COMPUTER: IBM PC compatible			
OPERATING SYSTEM: PC-DOS/MS-DOS			
SOFTWARE: PatentIn Release #1.0, Version #1.30			
CURRENT APPLICATION DATA:			
APPLICATION NUMBER: US/08/993,775B			
FILING DATE: 18-DEC-1997			
CLASSIFICATION: 514			
ATTORNEY/AGENT INFORMATION:			
NAME: Kitchell, Barbara S.			
REGISTRATION NUMBER: 33,928			
REFERENCE/DOCKET NUMBER: MECO:150			
TELECOMMUNICATION INFORMATION:			
TELEPHONE: 512/418-3000			
TELEFAX: 512/474-7577			
INFORMATION FOR SEQ ID NO: 98:			
SEQUENCE CHARACTERISTICS:			
LENGTH: 652 amino acids			
TYPE: amino acid			
TOPOLOGY: linear			
MOLECULE TYPE: protein			
US-08-993-775B-98			
Query Match		100.0%; Score 3406; DB 3; Length 652;	
Best Local Similarity		100.0%; Pred. No. 6e-287;	
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
Qy	1	MNPNRSEHDTIKVTPNSELOTHNOYPLADNPSTLEELNYKEFLRMTESSTEVLNDS 60	
Db	1	MNPNRSEHDTIKVTPNSELOTHNOYPLADNPSTLEELNYKEFLRMTESSTEVLNDS 60	
Qy	61	TVKDAVGTSVVGQILGVGVPFAGALTSFYQSFINTIPSDADPWKAFMAQVEVLIDK 120	
Db	61	TVKDAVGTSVVGQILGVGVPFAGALTSFYQSFINTIPSDADPWKAFMAQVEVLIDK 120	
Qy	121	KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELSQAESHFRN 180	
Db	121	KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELSQAESHFRN 180	
Qy	181	SNPSFAVSKEFVFLFTYQAANTHLLLDKAOVGEWGYSSDVAEFYHRLKLTQOY 240	
Db	181	SNPSFAVSKEFVFLFTYQAANTHLLLDKAOVGEWGYSSDVAEFYHRLKLTQOY 240	
Qy	241	TDHCNVNWNVGLRGSTYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300	
Db	241	TDHCNVNWNVGLRGSTYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300	
Qy	301	TRDIFTDPIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOGIEFHTRLOPGYFGKDSFNW 360	
Db	301	TRDIFTDPIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOGIEFHTRLOPGYFGKDSFNW 360	
Qy	361	SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYL 420	
Db	361	SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYL 420	
Qy	421	VTKVDFSOYDDOKNETSTQYDSKRNGHVSQAQDSIDQLPPTTDEPLEKAYSHQNLV 480	
Db	421	VTKVDFSOYDDOKNETSTQYDSKRNGHVSQAQDSIDQLPPTTDEPLEKAYSHQNLV 480	
Qy	481	CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540	
Db	481	CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540	
Qy	541	LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMK 600	
Db	541	LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMK 600	
Qy	601	DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652	
Db	601	DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652	

US-08-993-775B-111
 ; Sequence 111, Application US/08993775B
 ; Patent No. 6077824
 ; GENERAL INFORMATION:
 ; APPLICANT: English, Leigh H.
 ; APPLICANT: Bruesock, Susan M.
 ; APPLICANT: Malvar, Thomas W.
 ; APPLICANT: Bryson, James W.
 ; APPLICANT: Kulesza, Caroline A.
 ; APPLICANT: Walters, Frederick S.
 ; APPLICANT: Slatin, Stephen L.
 ; APPLICANT: Von Tersch, Michael A.
 ; TITLE OF INVENTION: METHODS FOR IMPROVING THE ACTIVITY OF
 ; DELTA-ENDOTOXINS AGAINST INSECT PESTS
 ; NUMBER OF SEQUENCES: 113
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Arnold, White & Durkee
 ; STREET: P.O. Box 4433
 ; CITY: Houston
 ; STATE: Texas
 ; COUNTRY: USA
 ; ZIP: 77210
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/993,775B
 ; FILING DATE: 18-DEC-1997
 ; CLASSIFICATION: 514
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Kitchell, Barbara S.
 ; REGISTRATION NUMBER: 33,928
 ; REFERENCE/DOCKET NUMBER: MECO:150
 ; TELEPHONE: 512/418-3000
 ; TELEFAX: 512/474-7577
 ; INFORMATION FOR SEQ ID NO: 111:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 652 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS:
 ; TOPOLOGY: linear
 ; US-08-993-775B-111

Query Match 100.0%; Score 3406; DB 3; Length 652;
 Best Local Similarity 100.0%; Pred. No. 6e-287;
 Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMWTESSDEVLDNS 60
 DB 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMWTESSDEVLDNS 60
 QY 61 TVKDAVGTGIVVGGQILGVVGVFPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK 120
 DB 61 TVKDAVGTGIVVGGQILGVVGVFPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK 120
 QY 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRRELFSQAESHFRN 180
 DB 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRRELFSQAESHFRN 180
 QY 181 SMPFSAVSKEVLFLPTYAAQANTHLLLLKDAQVGEEMWYSSSEDVAEFYHROLKLTQQY 240
 DB 181 SMPFSAVSKEVLFLPTYAAQANTHLLLLKDAQVGEEMWYSSSEDVAEFYHROLKLTQQY 240
 QY 241 TDHCVMNMYNGLNGLRGSTYDAWVKFNFRREMTLTVDLILVLPFYDIRLYSGVKTEL 300
 DB 241 TDHCVMNMYNGLNGLRGSTYDAWVKFNFRREMTLTVDLILVLPFYDIRLYSGVKTEL 300
 QY 301 TRDIFTDPIFSLNTLOEYGTFFLSIENSIRKPHLFDYLOQIEBHTRLQPGYFGKDSFNW 360
 DB 301 TRDIFTDPIFSLNTLOEYGTFFLSIENSIRKPHLFDYLOQIEBHTRLQPGYFGKDSFNW 360
 QY 361 SGNVETRSIGSSKTTITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGKYL 420
 DB 361 SGNVETRSIGSSKTTITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGKYL 420

QY 361 SGNVETRSIGSSKTTITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGKYL 420
 DB 361 SGNVETRSIGSSKTTITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGKYL 420
 QY 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDLPPETTTDEPLEKAYSHQLN 480
 DB 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDLPPETTTDEPLEKAYSHQLN 480
 QY 481 CFLMDRRGTTIPFTWTHRSVDFNTDAEKITQLPVVKAYALSSGASIIIEGPGFTG 540
 DB 481 CFLMDRRGTTIPFTWTHRSVDFNTDAEKITQLPVVKAYALSSGASIIIEGPGFTG 540
 QY 541 LFLKSSNSIAKPKVTLNSAALLQRYVRIRYASTTNLRFLVQNSNNDFLVIVINKTM 600
 DB 541 LFLKSSNSIAKPKVTLNSAALLQRYVRIRYASTTNLRFLVQNSNNDFLVIVINKTM 600
 QY 601 DDDLTYQTFLATNNSNMGFSGDKNELIIIGAEFVSNKEIYIDKIFIPVOL 652
 DB 601 DDDLTYQTFLATNNSNMGFSGDKNELIIIGAEFVSNKEIYIDKIFIPVOL 652
 RESULT 9
 US-09-377-466B-2
 ; Sequence 2, Application US/09377466B
 ; Patent No. 6501009
 ; GENERAL INFORMATION:
 ; APPLICANT: Romano, Charles P.
 ; TITLE OF INVENTION: Improved Expression of Cry3Bb Insecticidal Protein in Plants
 ; FILE REFERENCE: 38-21(15304) Cry3Bb Improved Exp. Corn
 ; CURRENT APPLICATION NUMBER: US/09/377,466B
 ; CURRENT FILING DATE: 1999-08-19
 ; NUMBER OF SEQ ID NOS: 43
 ; SOFTWARE: Patent in Ver. 2.0
 ; SEQ ID NO 2
 ; TYPE: PRT
 ; LENGTH: 652
 ; ORGANISM: Bacillus thuringiensis
 ; US-09-377-466B-2

Query Match 100.0%; Score 3406; DB 4; Length 652;
 Best Local Similarity 100.0%; Pred. No. 6e-287;
 Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMWTESSDEVLDNS 60
 DB 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMWTESSDEVLDNS 60
 QY 61 TVKDAVGTGIVVGGQILGVVGVFPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK 120
 DB 61 TVKDAVGTGIVVGGQILGVVGVFPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK 120
 QY 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRRELFSQAESHFRN 180
 DB 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRRELFSQAESHFRN 180
 QY 181 SMPFSAVSKEVLFLPTYAAQANTHLLLLKDAQVGEEMWYSSSEDVAEFYHROLKLTQQY 240
 DB 181 SMPFSAVSKEVLFLPTYAAQANTHLLLLKDAQVGEEMWYSSSEDVAEFYHROLKLTQQY 240
 QY 241 TDHCVMNMYNGLNGLRGSTYDAWVKFNFRREMTLTVDLILVLPFYDIRLYSGVKTEL 300
 DB 241 TDHCVMNMYNGLNGLRGSTYDAWVKFNFRREMTLTVDLILVLPFYDIRLYSGVKTEL 300
 QY 301 TRDIFTDPIFSLNTLOEYGTFFLSIENSIRKPHLFDYLOQIEBHTRLQPGYFGKDSFNW 360
 DB 301 TRDIFTDPIFSLNTLOEYGTFFLSIENSIRKPHLFDYLOQIEBHTRLQPGYFGKDSFNW 360
 QY 361 SGNVETRSIGSSKTTITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGKYL 420
 DB 361 SGNVETRSIGSSKTTITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGKYL 420
 QY 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDLPPETTTDEPLEKAYSHQLN 480

APPLICATION NUMBER: US/09/427,770
FILING DATE: 18-DEC-1997
CLASSIFICATION: US 08/993,722
PRIOR APPLICATION NUMBER: 18-DEC-1997
FILING DATE: 18-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:149
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-7577
TELEFAX: 512/418-7577
INFORMATION FOR SEQ ID NO: 111:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
STRANDEDNESS: linear
TOPOLOGY: linear
US-09-427-770-111

Query Match 100.0%; Score 3406; DB 4; Length 652;
Best Local Similarity 100.0%; Pred. No. 6e-287;
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNPNRSEHDTIKVTNPSELQTNHNOYPLADNPSTLEELNYKEFLRMTEDESDSSTEVLNLS 60
DB 1 MNPNRSEHDTIKVTNPSELQTNHNOYPLADNPSTLEELNYKEFLRMTEDESDSSTEVLNLS 60

QY 61 TVKDVGTVGIVVGVQILGVVGVFPAGALTSFYQSFNTIWPSDADPWKAFMAQVEVLIDK 120
DB 61 TVKDVGTVGIVVGVQILGVVGVFPAGALTSFYQSFNTIWPSDADPWKAFMAQVEVLIDK 120

QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRSELFSAESHFRN 180
DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRSELFSAESHFRN 180

QY 181 SMPFSAVSKFEVLFLPTTAAQAAANTHLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240
DB 181 SMPFSAVSKFEVLFLPTTAAQAAANTHLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240

QY 241 TDHCNVNWNVLNGLRGSTYDAWVKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300
DB 241 TDHCNVNWNVLNGLRGSTYDAWVKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300

QY 301 TRDIFTDPIFSLNTLQEYGTFLSIENSRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW 360
DB 301 TRDIFTDPIFSLNTLQEYGTFLSIENSRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW 360

QY 361 SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAPNGKVYLG 420
DB 361 SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAPNGKVYLG 420

QY 421 VTKVDFSDQDDQNETSTQYDSKRNGHVSAQDSIDQLPPETDDBLEKAYSHQNLNAYE 480
DB 421 VTKVDFSDQDDQNETSTQYDSKRNGHVSAQDSIDQLPPETDDBLEKAYSHQNLNAYE 480

QY 481 CFLMQDRRGITPFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIEGPGFTGGNL 540
DB 481 CFLMQDRRGITPFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIEGPGFTGGNL 540

QY 541 LFLKSSNSIAKPKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
DB 541 LFLKSSNSIAKPKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600

QY 601 DDDLTQYTFDLATNSNMFGSKNELIIGAESFVSNKIYIDKIFIPVOL 652
DB 601 DDDLTQYTFDLATNSNMFGSKNELIIGAESFVSNKIYIDKIFIPVOL 652

RESULT 12
US-09-427-769-98
; Sequence 98, Application US/09427769

Patent No. 6642030
GENERAL INFORMATION:
APPLICANT: English, Leigh H.
APPLICANT: Brussock, Susan M.
APPLICANT: Malvar, Thomas M.
APPLICANT: Bryson, James W.
APPLICANT: Kulesza, Caroline A.
APPLICANT: Walters, Frederick S.
APPLICANT: Slatin, Stephen L.
APPLICANT: Von Tersch, Michael A.
APPLICANT: Romano, Charles
TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/427,769
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/993,722
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:149
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3106
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 98:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-427-769-98

Query Match 100.0%; Score 3406; DB 4; Length 652;
Best Local Similarity 100.0%; Pred. No. 6e-287;
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNPNRSEHDTIKVTNPSELQTNHNOYPLADNPSTLEELNYKEFLRMTEDESDSSTEVLNLS 60
DB 1 MNPNRSEHDTIKVTNPSELQTNHNOYPLADNPSTLEELNYKEFLRMTEDESDSSTEVLNLS 60

QY 61 TVKDVGTVGIVVGVQILGVVGVFPAGALTSFYQSFNTIWPSDADPWKAFMAQVEVLIDK 120
DB 61 TVKDVGTVGIVVGVQILGVVGVFPAGALTSFYQSFNTIWPSDADPWKAFMAQVEVLIDK 120

QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRSELFSAESHFRN 180
DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRSELFSAESHFRN 180

QY 181 SMPFSAVSKFEVLFLPTTAAQAAANTHLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240
DB 181 SMPFSAVSKFEVLFLPTTAAQAAANTHLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240

QY 241 TDHCNVNWNVLNGLRGSTYDAWVKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300
DB 241 TDHCNVNWNVLNGLRGSTYDAWVKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300

QY 301 TRDIFTDPIFSLNTLQEYGTFLSIENSRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW 360

Db 301 TRDFTDPIFSLNTLOEYGPFTLSIENIRKPHLFDVLQGIETPRLQPGYFGKDSFNYW 360
Qy 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
Db 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
Qy 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPETTDEPLEKAYSHQLYAE 480
Db 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPETTDEPLEKAYSHQLYAE 480
Qy 481 CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITOLPVVKAYALSSGASIIIEGPGFTGNNL 540
Db 481 CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITOLPVVKAYALSSGASIIIEGPGFTGNNL 540
Qy 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Qy 601 DDDLYQTFDLATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
Db 601 DDDLYQTFDLATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 13
US-09-427-769-111
; Sequence 111, Application US/09427769
; Patent No. 6642030
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/427,769
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/993,722
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 111:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; STRANDEDNESS:
; TOPOLOGY: linear

US-09-427-769-111
Query Match 100.0%; Score 3406; DB 4; Length 652;
Best Local Similarity 100.0%; Pred. No. 6e-287;
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MNPNNRSEHDTTKVTPNSSELOTHNQYPLADPNPSTLEELNYKEFLRMTEDESSTEVLNLS 60
Db 1 MNPNNRSEHDTTKVTPNSSELOTHNQYPLADPNPSTLEELNYKEFLRMTEDESSTEVLNLS 60
Qy 61 TVKDAVGTGIVSVVGQILGVVGVPPFAGALTSFYOSFLNTIWPSSDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVSVVGQILGVVGVPPFAGALTSFYOSFLNTIWPSSDADPWKAFMAQVEVLIDK 120
Qy 121 KIEEYAKSALAELOGQNNFEDYVNALNSWKTPLSLRSKRSQDRIRLFSQAESHFN 180
Db 121 KIEEYAKSALAELOGQNNFEDYVNALNSWKTPLSLRSKRSQDRIRLFSQAESHFN 180
Qy 181 SMPSPAVSKPEVLFLPTYAQAANTHLLLLKDAQVGEWGYSSSEDVAEPVHRLKLTQOY 240
Db 181 SMPSPAVSKPEVLFLPTYAQAANTHLLLLKDAQVGEWGYSSSEDVAEPVHRLKLTQOY 240
Qy 241 TDHCVMNWNVGLNGLRGSTYDAWVKFNRRREMTLTVLDLIVLFPFVDIRLYSGVKTEL 300
Db 241 TDHCVMNWNVGLNGLRGSTYDAWVKFNRRREMTLTVLDLIVLFPFVDIRLYSGVKTEL 300
Qy 301 TRDFTDPIFSLNTLOEYGPFTLSIENIRKPHLFDVLQGIETPRLQPGYFGKDSFNYW 360
Db 301 TRDFTDPIFSLNTLOEYGPFTLSIENIRKPHLFDVLQGIETPRLQPGYFGKDSFNYW 360
Qy 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
Db 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
Qy 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPETTDEPLEKAYSHQLYAE 480
Db 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPETTDEPLEKAYSHQLYAE 480
Qy 481 CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITOLPVVKAYALSSGASIIIEGPGFTGNNL 540
Db 481 CFLMDRRGTIPFTTWTTHRSVDFNTIDAETITOLPVVKAYALSSGASIIIEGPGFTGNNL 540
Qy 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Qy 601 DDDLYQTFDLATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
Db 601 DDDLYQTFDLATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 14
5187091-2
; Patent No. 5187091
; APPLICANT: DONOVAN, WILLIAM P.; RUPAR, MARK J.; SLANEY,
; ANNETTE C.; JOHNSON, TIMOTHY B.
; TITLE OF INVENTION: BACILLUS THURINGIENSIS CRYIIIC GENE
; . ENCODING TOXIC TO COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/496,568
; FILING DATE: 20-MAR-1990
; SEQ ID NO: 2:
; LENGTH: 652
5187091-2
Query Match 100.0%; Score 3406; DB 6; Length 652;
Best Local Similarity 100.0%; Pred. No. 6e-287;
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MNPNNRSEHDTTKVTPNSSELOTHNQYPLADPNPSTLEELNYKEFLRMTEDESSTEVLNLS 60
Db 1 MNPNNRSEHDTTKVTPNSSELOTHNQYPLADPNPSTLEELNYKEFLRMTEDESSTEVLNLS 60

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QY 61 TVKDAVGTGIVVGGIILGVVGFAGALTSFYQSFNTIIPSDADPWKAFMAQVEVLIDK 120
DB 61 TVKDAVGTGIVVGGIILGVVGFAGALTSFYQSFNTIIPSDADPWKAFMAQVEVLIDK 120
QY 121 KIEEYAKSALAELOGLQNNFEDYVNALSWKKTPLSLRSKRSQDRIELFSAQESHFRN 180
DB 121 KIEEYAKSALAELOGLQNNFEDYVNALSWKKTPLSLRSKRSQDRIELFSAQESHFRN 180
QY 181 SMPFAVSFEVLFLPTYAAQANTHLLLLKDAQVGEEMGYSSDVAEFYHRLKLTQOY 240
DB 181 SMPFAVSFEVLFLPTYAAQANTHLLLLKDAQVGEEMGYSSDVAEFYHRLKLTQOY 240
QY 241 TDHCNVNNGVGLNGRSTYDAWVKFNRRREMTLTVLDLIVLFPFYDIRLSKGVKTEL 300
DB 241 TDHCNVNNGVGLNGRSTYDAWVKFNRRREMTLTVLDLIVLFPFYDIRLSKGVKTEL 300
QY 301 TRDIFTDPIFSLNTLQEGPTFLSIENSRKPHLFYLOGIEFHTRLPQGYFGKDSFNW 360
DB 301 TRDIFTDPIFSLNTLQEGPTFLSIENSRKPHLFYLOGIEFHTRLPQGYFGKDSFNW 360
QY 361 SGNVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYLG 420
DB 361 SGNVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQDSIDQLPPETDDEPLEKAYSHQLNYAE 480
DB 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQDSIDQLPPETDDEPLEKAYSHQLNYAE 480
QY 481 CFMDQRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIEGPGFTGGNL 540
DB 481 CFMDQRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIEGPGFTGGNL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
DB 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
QY 601 DDLLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
DB 601 DDLLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 15
5187091-2
;PATENT NO. 5187091
;APPLICANT: DONOVAN, WILLIAM P.; RUPAR, MARK J.; SLANEY,
;ANNETTE C.; JOHNSON, TIMOTHY B.
; TITLE OF INVENTION: BACILLUS THURINGIENSIS CRYIIIC GENE
; . ENCODING TOXIC TO COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 2
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/496,568
; FILING DATE: 20-MAR-1990
; SEQ ID NO: 2
; LENGTH: 652
5187091-2

Query Match 100.0%; Score 3406; DB 6; Length 652;
Best Local Similarity 100.0%; Pred. No. 66-287;
Matches 652; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTPNSLQTNHNYOPLADNPNSLTLEELNYKEFLRMTEDSSTEVLNDS 60
DB 1 MNPNNRSEHDTIKVTPNSLQTNHNYOPLADNPNSLTLEELNYKEFLRMTEDSSTEVLNDS 60
QY 61 TVKDAVGTGIVVGGIILGVVGFAGALTSFYQSFNTIIPSDADPWKAFMAQVEVLIDK 120
DB 61 TVKDAVGTGIVVGGIILGVVGFAGALTSFYQSFNTIIPSDADPWKAFMAQVEVLIDK 120
QY 121 KIEEYAKSALAELOGLQNNFEDYVNALSWKKTPLSLRSKRSQDRIELFSAQESHFRN 180
DB 121 KIEEYAKSALAELOGLQNNFEDYVNALSWKKTPLSLRSKRSQDRIELFSAQESHFRN 180
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QY 181 SMPFAVSFEVLFLPTYAAQANTHLLLLKDAQVGEEMGYSSDVAEFYHRLKLTQOY 240
DB 181 SMPFAVSFEVLFLPTYAAQANTHLLLLKDAQVGEEMGYSSDVAEFYHRLKLTQOY 240
QY 241 TDHCNVNNGVGLNGRSTYDAWVKFNRRREMTLTVLDLIVLFPFYDIRLSKGVKTEL 300
DB 241 TDHCNVNNGVGLNGRSTYDAWVKFNRRREMTLTVLDLIVLFPFYDIRLSKGVKTEL 300
QY 301 TRDIFTDPIFSLNTLQEGPTFLSIENSRKPHLFYLOGIEFHTRLPQGYFGKDSFNW 360
DB 301 TRDIFTDPIFSLNTLQEGPTFLSIENSRKPHLFYLOGIEFHTRLPQGYFGKDSFNW 360
QY 361 SGNVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYLG 420
DB 361 SGNVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKVYRTIANTDVAAMPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQDSIDQLPPETDDEPLEKAYSHQLNYAE 480
DB 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQDSIDQLPPETDDEPLEKAYSHQLNYAE 480
QY 481 CFMDQRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIEGPGFTGGNL 540
DB 481 CFMDQRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIEGPGFTGGNL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
DB 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
QY 601 DDLLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
DB 601 DDLLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 16
US-08-998-441B-68
; Sequence 68, Application US/089986441B
; Patent No. 6023013
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas W.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: INSECT-RESISTANT TRANSGENIC PLANTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/996,441B
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:151
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 68:
```

```

;
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-996-441B-68

Query Match          99.9%; Score 3402; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.3e-286;
Matches 651; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTPNSELOTNHNPYPLADNPSTLEELNYKEFLRMTEDSSTEVLNDS 60
Db 1 MNPNNRSEHDTIKVTPNSELOTNHNPYPLADNPSTLEELNYKEFLRMTEDSSTEVLNDS 60

Qy 61 TVKDAVGTGISVVGQILGVGVFPAGALTSPYQSFNTIWPSDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGISVVGQILGVGVFPAGALTSPYQSFNTIWPSDADPWKAFMAQVEVLIDK 120

Qy 121 KIEEVAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLEFSQAESHFRN 180
Db 121 KIEEVAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLEFSQAESHFRN 180

Qy 181 SMPFAVSKFEVLFLPTTYAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQY 240
Db 181 SMPFAVSKFEVLFLPTTYAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQY 240

Qy 241 TDHCNVNWNVGLNGLRGSTDYDAWKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300
Db 241 TDHCNVNWNVGLNGLRGSTDYDAWKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300

Qy 301 TRDIFTDIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOQIEFHTLRLOPGYFGKDSFNW 360
Db 301 TRDIFTDIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOQIEFHTLRLOPGYFGKDSFNW 360

Qy 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPQKLSFDGQKVRTIANTDVAAPNGKVYL 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPQKLSFDGQKVRTIANTDVAAPNGKVYL 420

Qy 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480
Db 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480

Qy 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Db 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540

Qy 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600

Qy 601 DDDLTYTQTDLATNNSMGFSGDKNELIIGAESFVSNEKIYIDKIEFTPVQL 652
Db 601 DDDLTYTQTDLATNNSMGFSGDKNELIIGAESFVSNEKIYIDKIEFTPVQL 652
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RESULT 17
US-08-993-722A-68
; Sequence 68, Application US/08993722A
; Patent No. 6060594
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLSOPOTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
```

```

;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,722A
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-993-722A-68

Query Match          99.9%; Score 3402; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.3e-286;
Matches 651; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTPNSELOTNHNPYPLADNPSTLEELNYKEFLRMTEDSSTEVLNDS 60
Db 1 MNPNNRSEHDTIKVTPNSELOTNHNPYPLADNPSTLEELNYKEFLRMTEDSSTEVLNDS 60

Qy 61 TVKDAVGTGISVVGQILGVGVFPAGALTSPYQSFNTIWPSDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGISVVGQILGVGVFPAGALTSPYQSFNTIWPSDADPWKAFMAQVEVLIDK 120

Qy 121 KIEEVAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLEFSQAESHFRN 180
Db 121 KIEEVAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLEFSQAESHFRN 180

Qy 181 SMPFAVSKFEVLFLPTTYAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQY 240
Db 181 SMPFAVSKFEVLFLPTTYAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQY 240

Qy 241 TDHCNVNWNVGLNGLRGSTDYDAWKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300
Db 241 TDHCNVNWNVGLNGLRGSTDYDAWKFNFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300

Qy 301 TRDIFTDIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOQIEFHTLRLOPGYFGKDSFNW 360
Db 301 TRDIFTDIFSLNTLOEYGPFTLSIENSIRKPHLFDYLOQIEFHTLRLOPGYFGKDSFNW 360

Qy 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPQKLSFDGQKVRTIANTDVAAPNGKVYL 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPQKLSFDGQKVRTIANTDVAAPNGKVYL 420

Qy 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480
Db 421 VTKVDFSYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480

Qy 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Db 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540

Qy 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600
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Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Qy 601 DDDLTYOTFDLATNSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652
Db 601 DDDLTYOTFDLATNSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652

RESULT 18
US-08-993-170A-68
; Sequence 68, Application US/08993170A
; Patent No. 6063597
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO
; TITLE OF INVENTION: COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,170A
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-993-170A-68

Query Match 99.94; Score 3402; DB 3; Length 652;
Best Local Similarity 99.84; Pred. No. 1.3e-286;
Matches 651; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTNPSELQTHNQYPLADNPNSTLEELNYKEFLRMTESSSTEVLDS 60
Db 1 MNPNNRSEHDTIKVTNPSELQTHNQYPLADNPNSTLEELNYKEFLRMTESSSTEVLDS 60
Qy 61 TVKDAGVTGIVGVGVFPAGALTSFYQSFLNTIWPSPADPWKAPMAQVEVLIDK 120
Db 61 TVKDAGVTGIVGVGVFPAGALTSFYQSFLNTIWPSPADPWKAPMAQVEVLIDK 120
Qy 121 KIEEYAKSKALAEQLQNNFNFDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN 180
Db 121 KIEEYAKSKALAEQLQNNFNFDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN 180
Qy 181 SMPFSAVSKFEVLFLPTYAQAAANTHLLLLKDAQVFGEEGYSSEDAEFAFHRQLKLTQOY 240
Db 181 SMPFSAVSKFEVLFLPTYAQAAANTHLLLLKDAQVFGEEGYSSEDAEFAFHRQLKLTQOY 240

Qy 241 TDCVNVNVLNGLRGSTYDAWVKNRPRREMTLTVDLIVLPPFYDIRLYSGVKTEL 300
Db 241 TDCVNVNVLNGLRGSTYDAWVKNRPRREMTLTVDLIVLPPFYDIRLYSGVKTEL 300
Qy 301 TRDIFTDPIFSLNTLQEGYGTPLSIEANSIRKPHLFDYLOQIEFHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLQEGYGTPLSIEANSIRKPHLFDYLOQIEFHTRLQPGYFGKDSFNW 360
Qy 361 SGNVETRPSIGSSKTIITSPFYGDKSTEPVKLSFDGQKVYRTIANTDVAAMPNGKYYLG 420
Db 361 SGNVETRPSIGSSKTIITSPFYGDKSTEPVKLSFDGQKVYRTIANTDVAAMPNGKYYLG 420
Qy 421 VTKVDFESQYDDQKNETSTOTYDSKRNNGHVSAQDSIDQLPPETTDDEPLEKAYSHQLNYAE 480
Db 421 VTKVDFESQYDDQKNETSTOTYDSKRNNGHVSAQDSIDQLPPETTDDEPLEKAYSHQLNYAE 480
Qy 481 CFLMQDRRGITPPFTTWRHSVDFNTIDAEKITOLPVKAYALSSGASIEGPGFTGGNL 540
Db 481 CFLMQDRRGITPPFTTWRHSVDFNTIDAEKITOLPVKAYALSSGASIEGPGFTGGNL 540
Qy 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Qy 601 DDDLTYOTFDLATNSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652
Db 601 DDDLTYOTFDLATNSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652

RESULT 19
US-08-993-775B-68
; Sequence 68, Application US/08993775B
; Patent No. 607824
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: METHODS FOR IMPROVING THE ACTIVITY OF
; TITLE OF INVENTION: DELTA-ENDOTOXINS AGAINST INSECT PESTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,775B
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:150
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-993-775B-68

Query Match 99.9%; Score 3402; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.3e-286;
Matches 651; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPSTLEELNYKFLRMTESSSTEVLNDS 60
DB 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPSTLEELNYKFLRMTESSSTEVLNDS 60
QY 61 TVKDAVGTGISVVGQILGVVGPFGAGALTSFYQSFLNTIWPSSDADPWKAFAQVEVLIDK 120
DB 61 TVKDAVGTGISVVGQILGVVGPFGAGALTSFYQSFLNTIWPSSDADPWKAFAQVEVLIDK 120
QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKESQDRIRELFSQAESHFRN 180
DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKESQDRIRELFSQAESHFRN 180
QY 181 SMPSPAVSKFEVLFLEPTVAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQOY 240
DB 181 SMPSPAVSKFEVLFLEPTVAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQOY 240
QY 241 TDHCNVNMYNGLRGSTYDAWKFNRRREMTLTVLDLIVLPFYDIRLYSKGVKTEL 300
DB 241 TDHCNVNMYNGLRGSTYDAWKFNRRREMTLTVLDLIVLPFYDIRLYSKGVKTEL 300
QY 301 TRDIFTDFISLNTLOEYGTPLSLSIENSRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW 360
DB 301 TRDIFTDFISLNTLOEYGTPLSLSIENSRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVQKLSPDQGVYRTIANTDVAAPNGKVYLG 420
DB 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVQKLSPDQGVYRTIANTDVAAPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQYDSKRNNHVSADSIDQLPPETTDPLEKAYSHQLNVAE 480
DB 421 VTKVDFSQYDDQKNETSTQYDSKRNNHVSADSIDQLPPETTDPLEKAYSHQLNVAE 480
QY 481 CFLMDQRRGTIPFTWTHRSVDFNTIDAEKITQLPVRKAYALSSGASIEEGPFTGGNL 540
DB 481 CFLMDQRRGTIPFTWTHRSVDFNTIDAEKITQLPVRKAYALSSGASIEEGPFTGGNL 540
QY 541 LFLKESNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
DB 541 LFLKESNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
QY 601 DDDLTQOTFDLATTNSNMGSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652
DB 601 DDDLTQOTFDLATTNSNMGSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652

RESULT 20

US-09-427-770-68
Sequence 68, Application US/09427770
Patent No. 6620988
GENERAL INFORMATION:
APPLICANT: English, Leigh H.
APPLICANT: Brussock, Susan M.
APPLICANT: Malvar, Thomas M.
APPLICANT: Bryson, James W.
APPLICANT: Kulesza, Caroline A.
APPLICANT: Walters, Frederick S.
APPLICANT: Slatin, Stephen L.
APPLICANT: Von Teresch, Michael A.
APPLICANT: Romano, Charles
TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433

CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/427,770
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA: US 08/993,722
APPLICATION NUMBER: 18-DEC-1997
FILING DATE: 18-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:149
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3106
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 68:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-427-770-68
Query Match 99.9%; Score 3402; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.3e-286;
Matches 651; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPSTLEELNYKFLRMTESSSTEVLNDS 60
DB 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPSTLEELNYKFLRMTESSSTEVLNDS 60
QY 61 TVKDAVGTGISVVGQILGVVGPFGAGALTSFYQSFLNTIWPSSDADPWKAFAQVEVLIDK 120
DB 61 TVKDAVGTGISVVGQILGVVGPFGAGALTSFYQSFLNTIWPSSDADPWKAFAQVEVLIDK 120
QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKESQDRIRELFSQAESHFRN 180
DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKESQDRIRELFSQAESHFRN 180
QY 181 SMPSPAVSKFEVLFLEPTVAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQOY 240
DB 181 SMPSPAVSKFEVLFLEPTVAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQOY 240
QY 241 TDHCNVNMYNGLRGSTYDAWKFNRRREMTLTVLDLIVLPFYDIRLYSKGVKTEL 300
DB 241 TDHCNVNMYNGLRGSTYDAWKFNRRREMTLTVLDLIVLPFYDIRLYSKGVKTEL 300
QY 301 TRDIFTDFISLNTLOEYGTPLSLSIENSRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW 360
DB 301 TRDIFTDFISLNTLOEYGTPLSLSIENSRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVQKLSPDQGVYRTIANTDVAAPNGKVYLG 420
DB 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVQKLSPDQGVYRTIANTDVAAPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQYDSKRNNHVSADSIDQLPPETTDPLEKAYSHQLNVAE 480
DB 421 VTKVDFSQYDDQKNETSTQYDSKRNNHVSADSIDQLPPETTDPLEKAYSHQLNVAE 480
QY 481 CFLMDQRRGTIPFTWTHRSVDFNTIDAEKITQLPVRKAYALSSGASIEEGPFTGGNL 540
DB 481 CFLMDQRRGTIPFTWTHRSVDFNTIDAEKITQLPVRKAYALSSGASIEEGPFTGGNL 540
QY 541 LFLKESNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
DB 541 LFLKESNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600

Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDPLVIYINKTMNK 600
Qy 601 DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
Db 601 DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
RESULT 21
US-09-427-769-68
; Sequence 68, Application US/09427769
; Patent No. 6642030
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/427,769
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/993,722
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-427-769-68
Query Match 99.9%; Score 3402; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.3e-286;
Matches 651; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 MNPNNRSEHDTIKVTNSELQTHNQYPLADNPNSTLEELNYKEFLRMTEDSDSTEVLNDS 60
Db 1 MNPNNRSEHDTIKVTNSELQTHNQYPLADNPNSTLEELNYKEFLRMTEDSDSTEVLNDS 60
Qy 61 TVKDVGVTGIVGVQILGVGVFPAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120
Db 61 TVKDVGVTGIVGVQILGVGVFPAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120
Qy 121 KIEYAKSKALAEQLQGNPNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSAQESHFRN 180
Db 121 KIEYAKSKALAEQLQGNPNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSAQESHFRN 180

Qy 181 SMPSPAVSKFEVLFLPTYAQAAANTHLLLLKDAQVFEEMGYSSSEDVAEFYHROLKLTQOY 240
Db 181 SMPSPAVSKFEVLFLPTYAQAAANTHLLLLKDAQVFEEMGYSSSEDVAEFYHROLKLTQOY 240
Qy 241 TDHCVMYNYVGLNGLRGSTYDAWVKFNFRREMTLTVDLILVLPFFYDIRLYSKGVKTEL 300
Db 241 TDHCVMYNYVGLNGLRGSTYDAWVKFNFRREMTLTVDLILVLPFFYDIRLYSKGVKTEL 300
Qy 301 TRDIFTDPIFSLNTLOEYGETFLSIENSIRKPHLFDYLOGIEFHTLROPYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGETFLSIENSIRKPHLFDYLOGIEFHTLROPYFGKDSFNW 360
Qy 361 SGNYVETRPSIGSSKTIITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGVYLG 420
Db 361 SGNYVETRPSIGSSKTIITSPFYGDKSTPEVKLSFDGQKVYRTIANTDVAWPNKGVYLG 420
Qy 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPPETTDPELEKAYSHQLNYAE 480
Db 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPPETTDPELEKAYSHQLNYAE 480
Qy 481 CFLMQDRRGCTIPEFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGGL 540
Db 481 CFLMQDRRGCTIPEFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGGL 540
Qy 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDPLVIYINKTMNK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDPLVIYINKTMNK 600
Qy 601 DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
Db 601 DDDLTYQTFDLATNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 22
US-08-996-441B-14
; Sequence 14, Application US/08996441B
; Patent No. 6023013
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: INSECT-RESISTANT TRANSGENIC PLANTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/996,441B
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:151
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577

INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-996-441B-14

Query Match 99.9%; Score 3401; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.6e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTPNSLQTNHNOYPLADNPSTLEELNYKEFLRMTESSSTEVLDS 60
Db 1 MNPNNRSEHDTIKVTPNSLQTNHNOYPLADNPSTLEELNYKEFLRMTESSSTEVLDS 60

QY 61 TVKDAVGTGIVGVGQILGVVGPFGAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVGVGQILGVVGPFGAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120

QY 121 KIEEYAKSKALAEQLQNNFEDYVNALNSWKTPLSRSKRSQDRIRELFSQAESHFRN 180
Db 121 KIEEYAKSKALAEQLQNNFEDYVNALNSWKTPLSRSKRSQDRIRELFSQAESHFRN 180

QY 181 SMPFSAVSKFEVLFLPTTAAQANTHLLKDAQVFGEEGWYSSDVAEFYHRQLKLTQY 240
Db 181 SMPFSAVSKFEVLFLPTTAAQANTHLLKDAQVFGEEGWYSSDVAEFYHRQLKLTQY 240

QY 241 TDHCNVNNGVGLNGRSTYDAWKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300
Db 241 TDHCNVNNGVGLNGRSTYDAWKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300

QY 301 TRDIFTDPIFSLNTLOEYGFPLSIENSIKPHLDYLOQIEFHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGFPLSIENSIKPHLDYLOQIEFHTRLQPGYFGKDSFNW 360

QY 361 SGNVETRPSIGSSKTIITSPYGDKSTEPVKLSFGQKRYRTIANTDVAAMPNGKVYLG 420
Db 361 SGNVETRPSIGSSKTIITSPYGDKSTEPVKLSFGQKRYRTIANTDVAAMPNGKVYLG 420

QY 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPPTTDEPLEKAYSHQLNYAE 480
Db 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPPTTDEPLEKAYSHQLNYAE 480

QY 481 CFLMQDRRGRTIPFTTWRSHRVDFTDAEKITQLPVVKAYALSSGASIIIEGPGFTGGNL 540
Db 481 CFLMQDRRGRTIPFTTWRSHRVDFTDAEKITQLPVVKAYALSSGASIIIEGPGFTGGNL 540

QY 541 LFLKSSNSIAKFKVTLSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Db 541 LFLKSSNSIAKFKVTLSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600

QY 601 DDLTYQTDFDLATNSNMGFGSDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
Db 601 DDLTYQTDFDLATNSNMGFGSDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 23
US-08-993-722A-14
Sequence 14, Application US/08993722A
Patent No. 6060594
GENERAL INFORMATION:
APPLICANT: English, Leigh H.
APPLICANT: Bruscock, Susan M.
APPLICANT: Malvar, Thomas M.
APPLICANT: Bryson, James W.
APPLICANT: Kulesza, Caroline A.
APPLICANT: Walters, Frederick S.
APPLICANT: Slatin, Stephen L.
APPLICANT: von Terssch, Michael A.
APPLICANT: Romano, Charles
TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS

NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/08/993,722A
FILING DATE: 18-DEC-1997
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:149
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3106
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-993-722A-14

Query Match 99.9%; Score 3401; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.6e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTPNSLQTNHNOYPLADNPSTLEELNYKEFLRMTESSSTEVLDS 60
Db 1 MNPNNRSEHDTIKVTPNSLQTNHNOYPLADNPSTLEELNYKEFLRMTESSSTEVLDS 60

QY 61 TVKDAVGTGIVGVGQILGVVGPFGAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVGVGQILGVVGPFGAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120

QY 121 KIEEYAKSKALAEQLQNNFEDYVNALNSWKTPLSRSKRSQDRIRELFSQAESHFRN 180
Db 121 KIEEYAKSKALAEQLQNNFEDYVNALNSWKTPLSRSKRSQDRIRELFSQAESHFRN 180

QY 181 SMPFSAVSKFEVLFLPTTAAQANTHLLKDAQVFGEEGWYSSDVAEFYHRQLKLTQY 240
Db 181 SMPFSAVSKFEVLFLPTTAAQANTHLLKDAQVFGEEGWYSSDVAEFYHRQLKLTQY 240

QY 241 TDHCNVNNGVGLNGRSTYDAWKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300
Db 241 TDHCNVNNGVGLNGRSTYDAWKFNRRREMTLVLDLIVLPFYDIRLYSKGVKTEL 300

QY 301 TRDIFTDPIFSLNTLOEYGFPLSIENSIKPHLDYLOQIEFHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGFPLSIENSIKPHLDYLOQIEFHTRLQPGYFGKDSFNW 360

QY 361 SGNVETRPSIGSSKTIITSPYGDKSTEPVKLSFGQKRYRTIANTDVAAMPNGKVYLG 420
Db 361 SGNVETRPSIGSSKTIITSPYGDKSTEPVKLSFGQKRYRTIANTDVAAMPNGKVYLG 420

QY 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPPTTDEPLEKAYSHQLNYAE 480
Db 421 VTKVDFSQYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPPTTDEPLEKAYSHQLNYAE 480

QY 481 CFLMQDRRGRTIPFTTWRSHRVDFTDAEKITQLPVVKAYALSSGASIIIEGPGFTGGNL 540
Db 481 CFLMQDRRGRTIPFTTWRSHRVDFTDAEKITQLPVVKAYALSSGASIIIEGPGFTGGNL 540

QY 541 LFLKSSNSIAKFKVTLSAALLQRYRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600

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Db 541 LFLKSSNSIAKFKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNDFLVIYINKTMNK 600
Qy 601 DDLTYQTDFLATNNSNMFGSGDKNELIIIGAESFVSNEKIYIDKIEFIPVOL 652
Db 601 DDLTYQTDFLATNNSNMFGSGDKNELIIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 24
US-08-993-170A-14
; Sequence 14, Application US/089931170A
; Patent No. 6063597
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO
; COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,170A
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-993-170A-14

Query Match 99.9%; Score 3401; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.6e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTNPSELQTNHNYPLADNPNTLEELNYKEFLRMTEDSSTEVLDS 60
Db 1 MNPNNRSEHDTIKVTNPSELQTNHNYPLADNPNTLEELNYKEFLRMTEDSSTEVLDS 60

Qy 61 TVKDAVGTGIVGVGQILGVGVVPFAGALTSPYQSLNTIWPSPADPKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVGVGQILGVGVVPFAGALTSPYQSLNTIWPSPADPKAFMAQVEVLIDK 120

Qy 121 KIEEYAKSALAELOQLQNNFEDYVNALNSKKTPLSLRSKRSQDRIRLFSQAESHFRN 180
Db 121 KIEEYAKSALAELOQLQNNFEDYVNALNSKKTPLSLRSKRSQDRIRLFSQAESHFRN 180

Qy 181 SMPFAVSKFEVLFLPTYQAANTHLLLLKDAQVFGEEWGYSSSEDAEFYHRLQKLTOQY 240
Db 181 SMPFAVSKFEVLFLPTYQAANTHLLLLKDAQVFGEEWGYSSSEDAEFYHRLQKLTOQY 240

Db 181 SMPFAVSKFEVLFLPTYQAANTHLLLLKDAQVFGEEWGYSSSEDAEFYHRLQKLTOQY 240
Qy 241 TDHCNVNMYNGLNGLRGSTDYDAWVKFNRRREMTLTVDLILVLPFPDYDILYSGVKVTEL 300
Db 241 TDHCNVNMYNGLNGLRGSTDYDAWVKFNRRREMTLTVDLILVLPFPDYDILYSGVKVTEL 300
Qy 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENIRKPHLFDYLOQIEFHTRLPQGYFGKDSFNYW 360
Db 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENIRKPHLFDYLOQIEFHTRLPQGYFGKDSFNYW 360
Qy 361 SGNVETRPSIGSSKITITSPPFYGDKSTEPVKQLSFDGQKVYRTIANTDVAWPNKGYL 420
Db 361 SGNVETRPSIGSSKITITSPPFYGDKSTEPVKQLSFDGQKVYRTIANTDVAWPNKGYL 420
Qy 421 VTKVDFSOYDDOKNETSTQYDSKRNGHVSADSIDQLPPTTDRPLEKAYSHQLNYAE 480
Db 421 VTKVDFSOYDDOKNETSTQYDSKRNGHVSADSIDQLPPTTDRPLEKAYSHQLNYAE 480
Qy 481 CFLMQDRRGITIPFPTWTHRSVDFPNTIDAEKITOLPVKAYALSSGASIEGPGFTGGNL 540
Db 481 CFLMQDRRGITIPFPTWTHRSVDFPNTIDAEKITOLPVKAYALSSGASIEGPGFTGGNL 540
Qy 541 LFLKSSNSIAKFKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNDFLVIYINKTMNK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNDFLVIYINKTMNK 600
Qy 601 DDLTYQTDFLATNNSNMFGSGDKNELIIIGAESFVSNEKIYIDKIEFIPVOL 652
Db 601 DDLTYQTDFLATNNSNMFGSGDKNELIIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 25
US-08-993-775B-14
; Sequence 14, Application US/08993775B
; Patent No. 6077824
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: METHODS FOR IMPROVING THE ACTIVITY OF
; DELTA-ENDOTOXINS AGAINST INSECT PESTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,775B
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:150
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
```

```
;
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-993-775B-14

Query Match      99.9%; Score 3401; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.6e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTPNSELOTNNQYPLADNPNTLLEELNYKEFLRMTEDSSTEVLDNS 60
Db 1 MNPNNRSEHDTIKVTPNSELOTNNQYPLADNPNTLLEELNYKEFLRMTEDSSTEVLDNS 60
QY 61 TVKDAVGTGISVVGQILGVGVPPAGALTSTFYQSFLNTIWPSPDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGISVVGQILGVGVPPAGALTSTFYQSFLNTIWPSPDADPWKAFMAQVEVLIDK 120
QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELFSQAESHFRN 180
Db 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELFSQAESHFRN 180
QY 181 SMPSPAVSKFEVLFTPTTAAQANTHLLLLKDAQVFGGEWGYSSSDVAEFYHRQLKLTQOY 240
Db 181 SMPSPAVSKFEVLFTPTTAAQANTHLLLLKDAQVFGGEWGYSSSDVAEFYHRQLKLTQOY 240
QY 241 TDHCVNWNVGLNGLRGSTDYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSKGVKTEL 300
Db 241 TDHCVNWNVGLNGLRGSTDYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSKGVKTEL 300
QY 301 TRDIFTDPILSNTLOEYGPFTLSIENSRKPHLFDYLGIEFHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPILSNTLOEYGPFTLSIENSRKPHLFDYLGIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVKLSFDGQKVYRTIANTDVAAPNGKVYLG 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVKLSFDGQKVYRTIANTDVAAPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQSDIDQLPETTDEPLEKAYSHQNLNVAE 480
Db 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQSDIDQLPETTDEPLEKAYSHQNLNVAE 480
QY 481 CFLMDRRGTIPFTTWTHTRSVDFNTIDAEKITQLPVKVAYALSSGASIEGPGFTGGNL 540
Db 481 CFLMDRRGTIPFTTWTHTRSVDFNTIDAEKITQLPVKVAYALSSGASIEGPGFTGGNL 540
QY 541 LFLKESNSIAKPKVTLSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
Db 541 LFLKESNSIAKPKVTLSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
QY 601 DDDLTYQTDFLATNNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652
Db 601 DDDLTYQTDFLATNNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652

RESULT 26
US-09-377-466B-6
; Sequence 6, Application US/09377466B
; Patent No. 6501009
; GENERAL INFORMATION:
; APPLICANT: Romano, Charles P.
; TITLE OF INVENTION: Improved Expression of Cry3Bb Insecticidal Protein in Plants
; FILE REFERENCE: 38-21(15304) Cry3Bb Improved Exp. Corn
; CURRENT APPLICATION NUMBER: US/09/377,466B
; CURRENT FILING DATE: 1999-08-19
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 652
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic or
; OTHER INFORMATION: non-naturally occurring amino acid sequence encoded by SEQ ID NO:
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;
; NAME/KEY: PRT
; LOCATION: (1)...(652)
US-09-377-466B-6

Query Match      99.9%; Score 3401; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.6e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTPNSELOTNNQYPLADNPNTLLEELNYKEFLRMTEDSSTEVLDNS 60
Db 1 MNPNNRSEHDTIKVTPNSELOTNNQYPLADNPNTLLEELNYKEFLRMTEDSSTEVLDNS 60
QY 61 TVKDAVGTGISVVGQILGVGVPPAGALTSTFYQSFLNTIWPSPDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGISVVGQILGVGVPPAGALTSTFYQSFLNTIWPSPDADPWKAFMAQVEVLIDK 120
QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELFSQAESHFRN 180
Db 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLELFSQAESHFRN 180
QY 181 SMPSPAVSKFEVLFTPTTAAQANTHLLLLKDAQVFGGEWGYSSSDVAEFYHRQLKLTQOY 240
Db 181 SMPSPAVSKFEVLFTPTTAAQANTHLLLLKDAQVFGGEWGYSSSDVAEFYHRQLKLTQOY 240
QY 241 TDHCVNWNVGLNGLRGSTDYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSKGVKTEL 300
Db 241 TDHCVNWNVGLNGLRGSTDYDAWVKFNFRREMTLTVLDLIVLFPFYDIRLYSKGVKTEL 300
QY 301 TRDIFTDPILSNTLOEYGPFTLSIENSRKPHLFDYLGIEFHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPILSNTLOEYGPFTLSIENSRKPHLFDYLGIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVKLSFDGQKVYRTIANTDVAAPNGKVYLG 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTEPVKLSFDGQKVYRTIANTDVAAPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQSDIDQLPETTDEPLEKAYSHQNLNVAE 480
Db 421 VTKVDFSQYDDQKNETSTQTYDSKRNGHVSAQSDIDQLPETTDEPLEKAYSHQNLNVAE 480
QY 481 CFLMDRRGTIPFTTWTHTRSVDFNTIDAEKITQLPVKVAYALSSGASIEGPGFTGGNL 540
Db 481 CFLMDRRGTIPFTTWTHTRSVDFNTIDAEKITQLPVKVAYALSSGASIEGPGFTGGNL 540
QY 541 LFLKESNSIAKPKVTLSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
Db 541 LFLKESNSIAKPKVTLSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
QY 601 DDDLTYQTDFLATNNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652
Db 601 DDDLTYQTDFLATNNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL 652

RESULT 27
US-09-427-770-14
; Sequence 14, Application US/09427770
; Patent No. 6620988
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
```

/ CITY: Houston
/ STATE: Texas
/ COUNTRY: USA
/ ZIP: 77210
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: IBM PC compatible
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/09/427,770
/ FILING DATE:
/ CLASSIFICATION:
/ PRIOR APPLICATION DATA:
/ APPLICATION NUMBER: US 08/993,722
/ FILING DATE: 18-DEC-1997
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Kitchell, Barbara S.
/ REGISTRATION NUMBER: 33,928
/ REFERENCE/DOCKET NUMBER: MECO:149
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 512/418-3106
/ TELEFAX: 512/474-7577
/ INFORMATION FOR SEQ ID NO: 14:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 652 amino acids
/ TYPE: amino acid
/ TOPOLOGY: linear
/ MOLECULE TYPE: protein
/ US-09-427-770-14

Query Match 99.9%; Score 3401; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.6e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTNPSELQTNHNQYPLADNPNTLEELNYKEFLRMTEDSDSTEVLDS 60
DB 1 MNPNNRSEHDTIKVTNPSELQTNHNQYPLADNPNTLEELNYKEFLRMTEDSDSTEVLDS 60

QY 61 TVKDAGVTGIVSVGQILGVGVPPFAGALTSFYQSFNTLTPSDADPWKAFMAQVEVLIDK 120
DB 61 TVKDAGVTGIVSVGQILGVGVPPFAGALTSFYQSFNTLTPSDADPWKAFMAQVEVLIDK 120

QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN 180
DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN 180

QY 181 SMPSPAVSKFEVLFLPTYAQAANTHLLKDAQVFGEEWGYSSDVAEFYHRLQKLTQY 240
DB 181 SMPSPAVSKFEVLFLPTYAQAANTHLLKDAQVFGEEWGYSSDVAEFYHRLQKLTQY 240

QY 241 TDHCNVNMYNGLRGSTYDAWKFNRRREMTLTVDLILVFPFYDIRLYSKGVKTEL 300
DB 241 TDHCNVNMYNGLRGSTYDAWKFNRRREMTLTVDLILVFPFYDIRLYSKGVKTEL 300

QY 301 TRDIFTDPIFSLNTLOEYGFPLSIENSIRKPHLPDYLOQIEFHTRLQPCYFGKDSFNW 360
DB 301 TRDIFTDPIFSLNTLOEYGFPLSIENSIRKPHLPDYLOQIEFHTRLQPCYFGKDSFNW 360

QY 361 SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKYRTIANTDVAAMPNGKVIYG 420
DB 361 SGNYVETRPSIGSSKTIITSPFYGDKSTEPVQKLSFDGQKYRTIANTDVAAMPNGKVIYG 420

QY 421 VTKVDFSDYDDQNETSTQYDSKRNNGHVSAQDSIDQLPPETDPLEKASHQNLNAYE 480
DB 421 VTKVDFSDYDDQNETSTQYDSKRNNGHVSAQDSIDQLPPETDPLEKASHQNLNAYE 480

QY 481 CFLMQDRRGTIPTFFTWTHRSVDFNTIDAEKITQLPVPKAYALSSGASIIIEGPGFTGGNL 540
DB 481 CFLMQDRRGTIPTFFTWTHRSVDFNTIDAEKITQLPVPKAYALSSGASIIIEGPGFTGGNL 540

QY 541 LFLKESNSIAKFKVTLNSAALLQRYRVRIRVASTTTLNRLFVQNSNDFLVIYINKTMNK 600
DB 541 LFLKESNSIAKFKVTLNSAALLQRYRVRIRVASTTTLNRLFVQNSNDFLVIYINKTMNK 600

DB 541 LFLKESNSIAKFKVTLNSAALLQRYRVRIRVASTTTLNRLFVQNSNDFLVIYINKTMNK 600
QY 601 DDOLTYQTDFDLATTSNMFGSGDKNELIIGAESFVSNKIYIDKIEFIPVOL 652
DB 601 DDOLTYQTDFDLATTSNMFGSGDKNELIIGAESFVSNKIYIDKIEFIPVOL 652

RESULT 28
US-09-427-769-14
; Sequence 14, Application US/09427769
; Patent No. 6642030
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLLOPOTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/427,769
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/993,722
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 14:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-427-769-14

Query Match 99.9%; Score 3401; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 1.6e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTNPSELQTNHNQYPLADNPNTLEELNYKEFLRMTEDSDSTEVLDS 60
DB 1 MNPNNRSEHDTIKVTNPSELQTNHNQYPLADNPNTLEELNYKEFLRMTEDSDSTEVLDS 60

QY 61 TVKDAGVTGIVSVGQILGVGVPPFAGALTSFYQSFNTLTPSDADPWKAFMAQVEVLIDK 120
DB 61 TVKDAGVTGIVSVGQILGVGVPPFAGALTSFYQSFNTLTPSDADPWKAFMAQVEVLIDK 120

QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN 180
DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN 180

Db	541	LFLKSSNSIAKFKVTLSAALLQRYVRIRYASTTNLRLRFVQNSNDFLVIYINKTMNK	600
QY	601	DDDLTYQTDFDLATTSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL	652
Db	601	DDDLTYQTDFDLATTSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVOL	652
RESULT 31			
US-08-993-722A-32			
; Sequence 32, Application US/08993722A			
; Patent No. 6060594			
; GENERAL INFORMATION:			
; APPLICANT: English, Leigh H.			
; APPLICANT: Brussock, Susan M.			
; APPLICANT: Malvar, Thomas M.			
; APPLICANT: Bryson, James W.			
; APPLICANT: Kulesza, Caroline A.			
; APPLICANT: Walters, Frederick S.			
; APPLICANT: Slatin, Stephen L.			
; APPLICANT: Von Tersch, Michael A.			
; APPLICANT: Romano, Charles			
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED			
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS			
; NUMBER OF SEQUENCES: 113			
; CORRESPONDENCE ADDRESS:			
; ADDRESSEE: Arnold, White & Durkee			
; STREET: P.O. Box 4433			
; CITY: Houston			
; STATE: Texas			
; COUNTRY: USA			
; ZIP: 77210			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Floppy disk			
; COMPUTER: IBM PC compatible			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: PatentIn Release #1.0, Version #1.30			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/08/993,722A			
; FILING DATE: 18-DEC-1997			
; CLASSIFICATION: 435			
; ATTORNEY/AGENT INFORMATION:			
; NAME: Kitchell, Barbara S.			
; REGISTRATION NUMBER: 33,928			
; REFERENCE/DOCKET NUMBER: MECO:149			
; TELECOMMUNICATION INFORMATION:			
; TELEPHONE: 512/418-3106			
; TELEFAX: 512/474-7577			
; INFORMATION FOR SEQ ID NO: 32:			
; SEQUENCE CHARACTERISTICS:			
; LENGTH: 652 amino acids			
; TYPE: amino acid			
; TOPOLOGY: linear			
; MOLECULE TYPE: protein			
US-08-993-722A-32			
Query Match 99.8%; Score 3400; DB 3; Length 652;			
Best Local Similarity 99.8%; Pred. No. 2e-286;			
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;			
QY	1	MNPNRSHDTIKVTPNSELTNNQYPLADNPNTSTLEELNYKEFLRMTEDSDSTEVLDS	60
Db	1	MNPNRSHDTIKVTPNSELTNNQYPLADNPNTSTLEELNYKEFLRMTEDSDSTEVLDS	60
QY	61	TVKDAVGTVGIVGQILGVGVPPAGALTSPYQSFNTIWPSDADPKAFMAQVEVLIDK	120
Db	61	TVKDAVGTVGIVGQILGVGVPPAGALTSPYQSFNTIWPSDADPKAFMAQVEVLIDK	120
QY	121	KIEEYAKSKALAEQLQGNPFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN	180
Db	121	KIEEYAKSKALAEQLQGNPFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN	180
QY	181	SNPFAVSKFEVLFLPTVAQAANTHLLLDKDAQVFGGEWYSSDVAEFYHROLKLTQY	240
Db	181	SNPFAVSKFEVLFLPTVAQAANTHLLLDKDAQVFGGEWYSSDVAEFYHROLKLTQY	240
QY	241	TDHCNNVNVGLNGLRGTYDAWKFNFRREMTLTVLDLIVLFPFYDIELYSKGVKTEL	300
Db	241	TDHCNNVNVGLNGLRGTYDAWKFNFRREMTLTVLDLIVLFPFYDIELYSKGVKTEL	300
QY	301	TRDIFTDPIFSLNTLQEGPTFLSIENSIRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW	360
Db	301	TRDIFTDPIFSLNTLQEGPTFLSIENSIRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW	360
QY	361	SGNVETRPSIGSSKTTSPYGDKSTPEVQKLSFDGQKYVRTIANTDVAAMPNGKYVLG	420
Db	361	SGNVETRPSIGSSKTTSPYGDKSTPEVQKLSFDGQKYVRTIANTDVAAMPNGKYVLG	420
QY	421	VTKVDYFSQYDQKNETSTQTVDSKRNNGHVSQAQSDIDQLPPTTDEPLEKAYSHQLNYAE	480
Db	421	VTKVDYFSQYDQKNETSTQTVDSKRNNGHVSQAQSDIDQLPPTTDEPLEKAYSHQLNYAE	480
QY	481	CFLQMDRGTGTPFTTWTHTRSVDFTNTIDAEKITOLPVVKAYALSSGASIIIEGPGFTGGNL	540
Db	481	CFLQMDRGTGTPFTTWTHTRSVDFTNTIDAEKITOLPVVKAYALSSGASIIIEGPGFTGGNL	540
QY	541	LFLKSSNSIAKFKVTLSAALLQRYVRIRYASTTNLRLRFVQNSNDFLVIYINKTMNK	600

Db 181 SMPFAVSKFVFLPTVAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQQY 240
QY 241 TDHCVNWNVGLNGLRGSTDYDAWKFNFRFRREMTLVLDLVLFPFFYDRLYSKGVKTEL 300
Db 241 TDHCVNWNVGLNGLRGSTDYDAWKFNFRFRREMTLVLDLVLFPFFYDRLYSKGVKTEL 300
QY 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIRKPHLFDYLOQIEFHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIRKPHLFDYLOQIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVETRPSIGSSKTTITSPFYGDKSTBPVKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
Db 361 SGNVETRPSIGSSKTTITSPFYGDKSTBPVKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
QY 421 VTKVDFSOYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHOLNVAE 480
Db 421 VTKVDFSOYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHOLNVAE 480
QY 481 CFLMDRRGTIPFPTWTHRSVDFFNTIDAOKITQLPVVKAYALSSGASIIISGPGFTGNL 540
Db 481 CFLMDRRGTIPFPTWTHRSVDFFNTIDAOKITQLPVVKAYALSSGASIIISGPGFTGNL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
QY 601 DDDLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVQL 652
Db 601 DDDLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVQL 652

RESULT 32

US-08-993-722A-48
; Sequence 48, Application US/08993722A
; Patent No. 6060594
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,722A
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:

; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-993-722A-48
Query Match 99.8%; Score 3400; DB 3; Length 652;
Best Local Similarity 99.7%; Pred. No. 2e-286;
Matches 650; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MNPNNRSEHTTIKVTNPSELQTHNQYPLADNPSTLEELNYKEFLRMTSDSSTVLNDS 60
Db 1 MNPNNRSEHTTIKVTNPSELQTHNQYPLADNPSTLEELNYKEFLRMTSDSSTVLNDS 60
QY 61 TVKDAVGTGIVVGVQILGVVGVFPAGALTTSFYQSFLNTIWPSDADPKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVVGVQILGVVGVFPAGALTTSFYQSFLNTIWPSDADPKAFMAQVEVLIDK 120
QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFNR 180
Db 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFNR 180
QY 181 SMPFAVSKFVFLPTVAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQQY 240
Db 181 SMPFAVSKFVFLPTVAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQQY 240
QY 241 TDHCVNWNVGLNGLRGSTDYDAWKFNFRFRREMTLVLDLVLFPFFYDRLYSKGVKTEL 300
Db 241 TDHCVNWNVGLNGLRGSTDYDAWKFNFRFRREMTLVLDLVLFPFFYDRLYSKGVKTEL 300
QY 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIRKPHLFDYLOQIEFHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIRKPHLFDYLOQIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVETRPSIGSSKTTITSPFYGDKSTBPVKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
Db 361 SGNVETRPSIGSSKTTITSPFYGDKSTBPVKLSFDGQKVYRTTANTDVAAPNGKVYLG 420
QY 421 VTKVDFSOYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHOLNVAE 480
Db 421 VTKVDFSOYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHOLNVAE 480
QY 481 CFLMDRRGTIPFPTWTHRSVDFFNTIDAOKITQLPVVKAYALSSGASIIISGPGFTGNL 540
Db 481 CFLMDRRGTIPFPTWTHRSVDFFNTIDAOKITQLPVVKAYALSSGASIIISGPGFTGNL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDFLVIYINKTNWK 600
QY 601 DDDLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVQL 652
Db 601 DDDLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNKEIYIDKIEFIPVQL 652

RESULT 33

US-08-993-170A-32
; Sequence 32, Application US/08993170A
; Patent No. 6063597
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO
; TITLE OF INVENTION: COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee

STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/08/993,170A
APPLICATION NUMBER: US/08/993,170A
FILING DATE: 18-DEC-1997
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:002
TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-993-170A-32

Query Match 99.8%; Score 3400; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 2e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY	1	MNPNNSEHDTIKVTNPSELQTNHNYPLADNPSTLEELNYKEFLRMTEDSDSTEVLDS	60
DB	1	MNPNNSEHDTIKVTNPSELQTNHNYPLADNPSTLEELNYKEFLRMTEDSDSTEVLDS	60
QY	61	TVKDAVGTGIVGVVQILGVVGVFPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
DB	61	TVKDAVGTGIVGVVQILGVVGVFPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
QY	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN	180
DB	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN	180
QY	181	SMPSFAVSKFEVLFLPTYAAQANTHLLILKDAQVFGEEWGYSSDYAEFVHROLKLTQY	240
DB	181	SMPSFAVSKFEVLFLPTYAAQANTHLLILKDAQVFGEEWGYSSDYAEFVHROLKLTQY	240
QY	241	TDHCNVNWNVGLNGLRGSTYDAWVKFNRRPREMTLTVLDLIVLPFVDIRLYSKGVKTEL	300
DB	241	TDHCNVNWNVGLNGLRGSTYDAWVKFNRRPREMTLTVLDLIVLPFVDIRLYSKGVKTEL	300
QY	301	TRDIFTDPIFSLNTLQEGTFLFSLIENIRKPHLPDYLOGIEPHTRLPQCYFGKDSFNWY	360
DB	301	TRDIFTDPIFSLNTLQEGTFLFSLIENIRKPHLPDYLOGIEPHTRLPQCYFGKDSFNWY	360
QY	361	SGNYVETRPSIGSSKTIISPFYGDKSTEPVKLSFGQKVYRTIANTDVAAMPNGKVYLG	420
DB	361	SGNYVETRPSIGSSKTIISPFYGDKSTEPVKLSFGQKVYRTIANTDVAAMPNGKVYLG	420
QY	421	VTKVDFPSQDDQKNETSTQYDSKRNGHVSAQDSIDQLPPTTDBPLEKAYSHOLNYAE	480
DB	421	VTKVDFPSQDDQKNETSTQYDSKRNGHVSAQDSIDQLPPTTDBPLEKAYSHOLNYAE	480
QY	481	CFLMQDRRGITPFTWTHRSVDFNTIDAETIQLPVPVKAYALSSGASIEEGFGFTGGNL	540
DB	481	CFLMQDRRGITPFTWTHRSVDFNTIDAETIQLPVPVKAYALSSGASIEEGFGFTGGNL	540
QY	541	LFLKSSNSTAKFKVTLNSAALLQRYRIRYATSTNLRFLVQNSNDFLVIYINKTMNK	600
DB	541	LFLKSSNSTAKFKVTLNSAALLQRYRIRYATSTNLRFLVQNSNDFLVIYINKTMNK	600

QY 601 DDDLTYQTDFLATNTSNMGFGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652
DB 601 DDDLTYQTDFLATNTSNMGFGDKNELIIGAESFVSNEKIYIDKIEFIPVOL 652

RESULT 34
US-08-993-170A-48
Sequence 48, Application US/08993170A
Patent No. 6063597
GENERAL INFORMATION:
APPLICANT: English, Leigh H.
APPLICANT: Brussock, Susan M.
APPLICANT: Malvar, Thomas M.
APPLICANT: Bryson, James W.
APPLICANT: Kulesza, Caroline A.
APPLICANT: Walters, Frederick S.
APPLICANT: Slatin, Stephen L.
APPLICANT: Von Tersch, Michael A.
TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO
NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/08/993,170A
FILING DATE: 18-DEC-1997
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:002
TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 48:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-993-170A-48

Query Match 99.8%; Score 3400; DB 3; Length 652;
Best Local Similarity 99.7%; Pred. No. 2e-286;
Matches 650; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY	1	MNPNNSEHDTIKVTNPSELQTNHNYPLADNPSTLEELNYKEFLRMTEDSDSTEVLDS	60
DB	1	MNPNNSEHDTIKVTNPSELQTNHNYPLADNPSTLEELNYKEFLRMTEDSDSTEVLDS	60
QY	61	TVKDAVGTGIVGVVQILGVVGVFPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
DB	61	TVKDAVGTGIVGVVQILGVVGVFPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
QY	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN	180
DB	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN	180
QY	181	SMPSFAVSKFEVLFLPTYAAQANTHLLILKDAQVFGEEWGYSSDYAEFVHROLKLTQY	240
DB	181	SMPSFAVSKFEVLFLPTYAAQANTHLLILKDAQVFGEEWGYSSDYAEFVHROLKLTQY	240
QY	241	TDHCNVNWNVGLNGLRGSTYDAWVKFNRRPREMTLTVLDLIVLPFVDIRLYSKGVKTEL	300

Tue Feb 15 13:16:10 2005

Db 241 TDHCVNWNVLGSLRGSTYDAWKFRFRREMTLTVDLILVLPFFVDVRLYKGVKTEL 300
Qy 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIKPKHFLDYLOGIEPHTRLOPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIKPKHFLDYLOGIEPHTRLOPGYFGKDSFNW 360
Qy 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKQVYRTIANTDVAAPNGKVYLG 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKQVYRTIANTDVAAPNGKVYLG 420
Qy 421 VTKVDFSOYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHQNLN 480
Db 421 VTKVDFSOYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHQNLN 480
Qy 481 CFLMDRRGTIPFTTWRHSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Db 481 CFLMDRRGTIPFTTWRHSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Qy 541 LFLKSSNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Db 541 LFLKSSNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Qy 601 DDDLTYTQTFDLATTSNMFGSGDKNELIIGABSFVSNEKIYIDKIEFIPVOL 652
Db 601 DDDLTYTQTFDLATTSNMFGSGDKNELIIGABSFVSNEKIYIDKIEFIPVOL 652

RESULT 35
US-08-993-775B-32

; Sequence 32, Application US/08993775B
; Patent No. 6077824

; GENERAL INFORMATION:

; APPLICANT: English, Leigh H.

; APPLICANT: Brussock, Susan M.

; APPLICANT: Malvar, Thomas M.

; APPLICANT: Bryson, James W.

; APPLICANT: Kulesza, Caroline A.

; APPLICANT: Walters, Frederick S.

; APPLICANT: Slatin, Stephen L.

; APPLICANT: Von Tersch, Michael A.

; TITLE OF INVENTION: METHODS FOR IMPROVING THE ACTIVITY OF

; TITLE OF INVENTION: DELTA-ENDOTOXINS AGAINST INSECT PESTS

; NUMBER OF SEQUENCES: 113

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Arnold, White & Durkee

; STREET: P.O. Box 4433

; CITY: Houston

; STATE: Texas

; COUNTRY: USA

; ZIP: 77210

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patentin Release #1.0, Version #1.30

; CURRENT APPLICATION DATA: US/08/993,775B

; FILING DATE: 18-DEC-1997

; CLASSIFICATION: 514

; ATTORNEY/AGENT INFORMATION:

; NAME: Kitchell, Barbara S.

; REGISTRATION NUMBER: 33,928

; REFERENCE/DOCKET NUMBER: MECO:150

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 512/418-3000

; TELEFAX: 512/474-7577

; INFORMATION FOR SEQ ID NO: 32:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 652 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: protein

US-08-993-775B-32

Query Match 99.8%; Score 3400; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 2e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MNPNRSEHDTIKVTPNSELOTNNHNOYPLADNPSTLEELNKPFLRMTEDSSTEVLNDS 60
Db 1 MNPNRSEHDTIKVTPNSELOTNNHNOYPLADNPSTLEELNKPFLRMTEDSSTEVLNDS 60
Qy 61 TVKDAVGTCISVVGQILGVGVFPFAGALTSPYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTCISVVGQILGVGVFPFAGALTSPYQSFLNTIWPSDADPWKAFMAQVEVLIDK 120
Qy 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKESODRIELFSQAESHFRN 180
Db 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKESODRIELFSQAESHFRN 180
Qy 181 SMPSPAVSKPEVLFPTYAQAANTHLLLLKDAQVGEWGYSSSDVAFYHRLKLTQOY 240
Db 181 SMPSPAVSKPEVLFPTYAQAANTHLLLLKDAQVGEWGYSSSDVAFYHRLKLTQOY 240
Qy 241 TDHCVNWNVLGSLRGSTYDAWKFRFRREMTLTVDLILVLPFFVDVRLYKGVKTEL 300
Db 241 TDHCVNWNVLGSLRGSTYDAWKFRFRREMTLTVDLILVLPFFVDVRLYKGVKTEL 300
Qy 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIKPKHFLDYLOGIEPHTRLOPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGPFTFLSIENSIKPKHFLDYLOGIEPHTRLOPGYFGKDSFNW 360
Qy 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKQVYRTIANTDVAAPNGKVYLG 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVOKLSFDGQKQVYRTIANTDVAAPNGKVYLG 420
Qy 421 VTKVDFSOYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHQNLN 480
Db 421 VTKVDFSOYDDQKNETSTQYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHQNLN 480
Qy 481 CFLMDRRGTIPFTTWRHSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Db 481 CFLMDRRGTIPFTTWRHSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Qy 541 LFLKSSNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Db 541 LFLKSSNSIAKPKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMNK 600
Qy 601 DDDLTYTQTFDLATTSNMFGSGDKNELIIGABSFVSNEKIYIDKIEFIPVOL 652
Db 601 DDDLTYTQTFDLATTSNMFGSGDKNELIIGABSFVSNEKIYIDKIEFIPVOL 652

RESULT 36

US-08-993-775B-48

; Sequence 48, Application US/08993775B

; Patent No. 6077824

; GENERAL INFORMATION:

; APPLICANT: English, Leigh H.

; APPLICANT: Brussock, Susan M.

; APPLICANT: Malvar, Thomas M.

; APPLICANT: Bryson, James W.

; APPLICANT: Kulesza, Caroline A.

; APPLICANT: Walters, Frederick S.

; APPLICANT: Slatin, Stephen L.

; APPLICANT: Von Tersch, Michael A.

; TITLE OF INVENTION: METHODS FOR IMPROVING THE ACTIVITY OF

; TITLE OF INVENTION: DELTA-ENDOTOXINS AGAINST INSECT PESTS

; NUMBER OF SEQUENCES: 113

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Arnold, White & Durkee

; STREET: P.O. Box 4433

; CITY: Houston

; STATE: Texas

; COUNTRY: USA

```

;
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,775B
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:150
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3000
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-993-775B-48

Query Match          99.8%; Score 3400; DB 3; Length 652;
Best Local Similarity 99.7%; Pred. No. 2e-286;
Matches 650; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMTESSSTEVLNLS 60
Db 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMTESSSTEVLNLS 60

Qy 61 TVKDAVGTGIVGVVQILGVVGFAGALTSFYQSFNTIWPSPADPKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVGVVQILGVVGFAGALTSFYQSFNTIWPSPADPKAFMAQVEVLIDK 120

Qy 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN 180
Db 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN 180

Qy 181 SMPSPFAVSKFEVLFLPTYAAQANTHLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQY 240
Db 181 SMPSPFAVSKFEVLFLPTYAAQANTHLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQY 240

Qy 241 TDHCNVNWNVGLNGLRGSTYDAWKENRFRREMTLTVLDLVLFPFVDRLYSKGVKTEL 300
Db 241 TDHCNVNWNVGLNGLRGSTYDAWKENRFRREMTLTVLDLVLFPFVDRLYSKGVKTEL 300

Qy 301 TRDIFTDPIFSLNTLOEYGTFFLSIENSIRKPHLFDYLOQIEPHTRLQPGYFGKDSFNW 360
Db 301 TRDIFTDPIFSLNTLOEYGTFFLSIENSIRKPHLFDYLOQIEPHTRLQPGYFGKDSFNW 360

Qy 361 SGNVETRPISGSKTITSPYGDKSTPEVQKLSFGQKQYRTIANTDVAAMPNGKYLG 420
Db 361 SGNVETRPISGSKTITSPYGDKSTPEVQKLSFGQKQYRTIANTDVAAMPNGKYLG 420

Qy 421 VTKVDFSOYDDQNETSTQYDSKRNGHVSQAQSDIDLPETTDPELEKAYSHQNYAE 480
Db 421 VTKVDFSOYDDQNETSTQYDSKRNGHVSQAQSDIDLPETTDPELEKAYSHQNYAE 480

Qy 481 CFLMQDRRGITPFTTWTTHRSVDPFNTIDAEKITQLPVKAYALSSGASIIIEGFGTGGNL 540
Db 481 CFLMQDRRGITPFTTWTTHRSVDPFNTIDAEKITQLPVKAYALSSGASIIIEGFGTGGNL 540

Qy 541 LFLKESNSIAKPKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNDFLVIYINKTMK 600
Db 541 LFLKESNSIAKPKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNDFLVIYINKTMK 600

Qy 601 DDDLTYQTFLATNSNMGFGDKNELIIIGAESFVSNEKIYIDKIEPIPVOL 652
Db 601 DDDLTYQTFLATNSNMGFGDKNELIIIGAESFVSNEKIYIDKIEPIPVOL 652
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RESULT 37
US-09-427-770-32
; Sequence 32, Application US/09427770
; Patent No. 6620988
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/427,770
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/993,722
; FILING DATE: 18-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 32:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-427-770-32

Query Match          99.8%; Score 3400; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 2e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMTESSSTEVLNLS 60
Db 1 MNPNNRSEHDTIKVTPNSELOTHNQYPLADNPNSTLEELNYKEFLRMTESSSTEVLNLS 60

Qy 61 TVKDAVGTGIVGVVQILGVVGFAGALTSFYQSFNTIWPSPADPKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVGVVQILGVVGFAGALTSFYQSFNTIWPSPADPKAFMAQVEVLIDK 120

Qy 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN 180
Db 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLFSQAESHFRN 180

Qy 181 SMPSPFAVSKFEVLFLPTYAAQANTHLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQY 240
Db 181 SMPSPFAVSKFEVLFLPTYAAQANTHLLKDAQVFGEEWGYSSDVAEFYHRQLKLTQY 240

Qy 241 TDHCNVNWNVGLNGLRGSTYDAWKENRFRREMTLTVLDLVLFPFVDRLYSKGVKTEL 300
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Db 241 TDHCVNWTNVLGSLRGSTYDAWVKFNFRREMTLTVLDLVLFPFYDIRLSKGVKTEL 300
QY 301 TRDIFTDPFSLNTLQEGPTFLSIENSIRKPHLFDYLQIEFHTLQPGYFGKDSFNW 360
Db 301 TRDIFTDPFSLNTLQEGPTFLSIENSIRKPHLFDYLQIEFHTLQPGYFGKDSFNW 360
QY 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVRTIANTDVAAPNGKVYL 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVRTIANTDVAAPNGKVYL 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480
Db 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480
QY 481 CFLMDORRGTTIPFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Db 481 CFLMDORRGTTIPFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540
QY 541 LFLKSSNSIAKFKVTLSAALLQRYVRIRVASTTNLRLFVQNSNNDFLVIYINKTNK 600
Db 541 LFLKSSNSIAKFKVTLSAALLQRYVRIRVASTTNLRLFVQNSNNDFLVIYINKTNK 600
QY 601 DDDLTYQTFLDATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652
Db 601 DDDLTYQTFLDATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652

RESULT 38

US-09-427-770-48
; Sequence 48, Application US/09427770
; Patent No. 6620988
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESS: Arnold, White & Durkee
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/427,770
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/993,722
; FILING DATE: 18-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 48:
; SEQUENCE CHARACTERISTICS:

; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-427-770-48
Query Match 99.8%; Score 3400; DB 4; Length 652;
Best Local Similarity 99.7%; Pred. No. 2e-286;
Matches 650; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
QY 1 MNPNNRSEHDTIKVTPNSELTQNHQYPLADNPSTLEELNYKEFLRMTEDSSSTEVLDNS 60
Db 1 MNPNNRSEHDTIKVTPNSELTQNHQYPLADNPSTLEELNYKEFLRMTEDSSSTEVLDNS 60
QY 61 TVKDAVGTGISVWGQILGVGVPFAGALTTSFYQSFLANTIPSDADPKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGISVWGQILGVGVPFAGALTTSFYQSFLANTIPSDADPKAFMAQVEVLIDK 120
QY 121 KIEEYAKSKALAEQGLQNNPFDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFN 180
Db 121 KIEEYAKSKALAEQGLQNNPFDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFN 180
QY 181 SMPSFVSKFEVLFPYVAQAANTHLLLLKDAQVFGEEWYSSDEVAEFYHRQLKLTQY 240
Db 181 SMPSFVSKFEVLFPYVAQAANTHLLLLKDAQVFGEEWYSSDEVAEFYHRQLKLTQY 240
QY 241 TDHCVNWTNVLGSLRGSTYDAWVKFNFRREMTLTVLDLVLFPFYDIRLSKGVKTEL 300
Db 241 TDHCVNWTNVLGSLRGSTYDAWVKFNFRREMTLTVLDLVLFPFYDIRLSKGVKTEL 300
QY 301 TRDIFTDPFSLNTLQEGPTFLSIENSIRKPHLFDYLQIEFHTLQPGYFGKDSFNW 360
Db 301 TRDIFTDPFSLNTLQEGPTFLSIENSIRKPHLFDYLQIEFHTLQPGYFGKDSFNW 360
QY 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVRTIANTDVAAPNGKVYL 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVRTIANTDVAAPNGKVYL 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480
Db 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSQAQSIDQLPPTTDEPLEKAYSHQNLV 480
QY 481 CFLMDORRGTTIPFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540
Db 481 CFLMDORRGTTIPFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGNL 540
QY 541 LFLKSSNSIAKFKVTLSAALLQRYVRIRVASTTNLRLFVQNSNNDFLVIYINKTNK 600
Db 541 LFLKSSNSIAKFKVTLSAALLQRYVRIRVASTTNLRLFVQNSNNDFLVIYINKTNK 600
QY 601 DDDLTYQTFLDATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652
Db 601 DDDLTYQTFLDATTNSNMFGSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652

RESULT 39

US-09-427-769-32
; Sequence 32, Application US/09427769
; Patent No. 6642030
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:

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Qy 541 LFLKESNSIAKFKVTILNSAALLQRYRVIRIYASTTNLRLRFVQNSNDFLVIYINKTNK 652
Db 541 LFLKESNSIAKFKVTILNSAALLQRYRVIRIYASTTNLRLRFVQNSNDFLVIYINKTNK 652
Qy 601 DDDLTYYOTFDLATTNSNMGFSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652
Db 601 DDDLTYYOTFDLATTNSNMGFSGDKNELIIGAESFVSNEKIYIDKIEFIPVQL 652

RESULT 40
US-09-427-769-48
; Sequence 48, Application US/09427769
; Patent No. 6642030
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Teresch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210

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1 ZIP: 77210
2
3 COMPUTER READABLE FORM:
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5 MEDIUM TYPE: Floppy disk
6
7 COMPUTER: IBM PC compatible
8
9 OPERATING SYSTEM: PC-DOS/MS-DOS
10
11 SOFTWARE: PatentIn Release #1.0, Version #1.30
12
13 CURRENT APPLICATION DATA:
14
15 APPLICATION NUMBER: US/09/427,769
16
17 FILING DATE:
18
19 CLASSIFICATION:
20
21 PRIOR APPLICATION DATA:
22
23 APPLICATION NUMBER: 08/993,722
24
25 FILING DATE:
26
27 ATTORNEY/AGENT INFORMATION:
28
29 NAME: Kitchell, Barbara S.
30
31 REGISTRATION NUMBER: 33,928
32
33 REFERENCE/DOCKET NUMBER: MECO:149
34
35 TELECOMMUNICATION INFORMATION:
36
37 TELEPHONE: 512/418-3106
38
39 TELEFAX: 512/474-7577
40
41 INFORMATION FOR SEQ ID NO: 48:
42
43 SEQUENCE CHARACTERISTICS:
44
45 LENGTH: 652 amino acids
46
47 TYPE: amino acid
48
49 TOPOLOGY: linear
50
51 MOLECULE TYPE: protein
52
53 US-09-427-769-48
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121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLEFSQAESHPRN 180
181 SMPSPAVSFEVLFTPTAAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQOY 240
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241 TDHCNVNNGVGLRGSTYDAWVKFNPRFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300
241 TDHCNVNNGVGLRGSTYDAWVKFNPRFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300
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481 CFLMODRRGTIPFFTWTHRSVDFNTIDAETITOLPVVKAYALSSGASIIIEGPGFTGNNL 540
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601 DDLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652

RESULT 41

US-08-996-441B-44
; Sequence 44, Application US/08996441B
; Patent No. 6023013
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: INSECT-RESISTANT TRANSGENIC PLANTS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/996,441B
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 800
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:151
; TELECOMMUNICATION INFORMATION:

TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
; INFORMATION FOR SEQ ID NO: 44:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-996-441B-44

Query Match 99.8%; Score 3399; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 2.4e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MNPNNRSEHDTIKVTPNSELOTNHNQYPLADNPNSTIEELNYKEFLRMTESSSTEVLDNS 60
Db 1 MNPNNRSEHDTIKVTPNSELOTNHNQYPLADNPNSTIEELNYKEFLRMTESSSTEVLDNS 60
QY 61 TVKDAVGTGISVWGQILGVGVPPFAGALTSPYQSFLLNTIWPSPDADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGISVWGQILGVGVPPFAGALTSPYQSFLLNTIWPSPDADPWKAFMAQVEVLIDK 120
QY 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLEFSQAESHPRN 180
Db 121 KIEEYAKSALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRLEFSQAESHPRN 180
QY 181 SMPSPAVSFEVLFTPTAAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQOY 240
Db 181 SMPSPAVSFEVLFTPTAAQAANTHLLLLKDAQVGEWGYSSDVAEFYHRQLKLTQOY 240
QY 241 TDHCNVNNGVGLRGSTYDAWVKFNPRFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300
Db 241 TDHCNVNNGVGLRGSTYDAWVKFNPRFRREMTLTVLDLIVLFPFYDIRLYSGVKTEL 300
QY 301 TRDIFTDTPSLNTLOEYGPFTLSIENSIRKPHLDYLOQIEFHTLQPGYFGKDSFNW 360
Db 301 TRDIFTDTPSLNTLOEYGPFTLSIENSIRKPHLDYLOQIEFHTLQPGYFGKDSFNW 360
QY 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVKLSFDGQKVRTIANTDVAAPNGKVYLG 420
Db 361 SGNVYETRPSIGSSKTIITSPFYGDKSTPEVKLSFDGQKVRTIANTDVAAPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHQNLV 480
Db 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPETTDEPLEKAYSHQNLV 480
QY 481 CFLMODRRGTIPFFTWTHRSVDFNTIDAETITOLPVVKAYALSSGASIIIEGPGFTGNNL 540
Db 481 CFLMODRRGTIPFFTWTHRSVDFNTIDAETITOLPVVKAYALSSGASIIIEGPGFTGNNL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRVASTTNLRLFVQNSNNDPLVIYINKTMNK 600
Db 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRVASTTNLRLFVQNSNNDPLVIYINKTMNK 600
QY 601 DDLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652
Db 601 DDLTYQTDFDLATNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652

RESULT 42

US-08-996-441B-54
; Sequence 54, Application US/08996441B
; Patent No. 6023013
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles

TITLE OF INVENTION: INSECT-RESISTANT TRANSGENIC PLANTS
NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:

ADDRESSEE: Arnold, White & Durkee

STREET: P.O. Box 4433

CITY: Houston

STATE: Texas

COUNTRY: USA

ZIP: 77210

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/996,441B

FILING DATE: 18-DEC-1997

CLASSIFICATION: 800

ATTORNEY/AGENT INFORMATION:

NAME: Kitchell, Barbara S.

REGISTRATION NUMBER: 33,928

REFERENCE/DOCKET NUMBER: MECO:151

TELECOMMUNICATION INFORMATION:

TELEPHONE: 512/418-3000

TELEFAX: 512/474-7577

INFORMATION FOR SEQ ID NO: 54:

SEQUENCE CHARACTERISTICS:

LENGTH: 652 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-996-441B-54

Query Match 99.8%; Score 3399; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 2.4e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy	1	MNPNNRSEHDTIKVTNPSELQTNHNOYPLADNPNSTLEELNYKEFLRMTEDSSSTEVLNDS	60
Db	1	MNPNNRSEHDTIKVTNPSELQTNHNOYPLADNPNSTLEELNYKEFLRMTEDSSSTEVLNDS	60
Qy	61	TVKDAVGTGIVSVVQILGVVGVPPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
Db	61	TVKDAVGTGIVSVVQILGVVGVPPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
Qy	121	KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRQDRIRRELFSQAESHFRN	180
Db	121	KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRQDRIRRELFSQAESHFRN	180
Qy	181	SMPSFAVSKFEVLFLPTYAQANHTLLKDAQVFGGEWGYSSSEDVAEFYHROLKLTQQY	240
Db	181	SMPSFAVSGFEVLFLPTYAQANHTLLKDAQVFGGEWGYSSSEDVAEFYHROLKLTQQY	240
Qy	241	TDHCVMYNYGLNGLRGSTYDAWKFNRRFMTLTVDLIVLFPFYDIRLSYKGVKTEL	300
Db	241	TDHCVMYNYGLNGLRGSTYDAWKFNRRFMTLTVDLIVLFPFYDIRLSYKGVKTEL	300
Qy	301	TRDIFTDPIESLNTLOEYGTPLFSLIENSIRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW	360
Db	301	TRDIFTDPIESLNTLOEYGTPLFSLIENSIRKPHLPDYLOGIEFHTRLQPGYFGKDSFNW	360
Qy	361	SGNYVETRPISGSKTITSFPYGDKSTPEYQKLSFDQKQVYRTIANTDVAWPNKGVYLG	420
Db	361	SGNYVETRPISGSKTITSFPYGDKSTPEYQKLSFDQKQVYRTIANTDVAWPNKGVYLG	420
Qy	421	VTKVDFSQYDDQKNETSTQTYDSKRNGHVSQAQSDIDQLPPETTDEPLEKAYSHQLNYAE	480
Db	421	VTKVDFSQYDDQKNETSTQTYDSKRNGHVSQAQSDIDQLPPETTDEPLEKAYSHQLNYAE	480
Qy	481	CFLMQDRRGITPFTWTHRSVDFEFTIDAEKITQLPVKAYALSSGASIIIEGPGFTGGNL	540
Db	481	CFLMQDRRGITPFTWTHRSVDFEFTIDAEKITQLPVKAYALSSGASIIIEGPGFTGGNL	540

Qy	541	LFLKESNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNDFLVIYINKTNK	600
Db	541	LFLKESNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNDFLVIYINKTNK	600
Qy	601	DDDLTYQTFLDATTNSNMGFGDKNELIICAESFVSNKEIYIDKIEFIPVOL	652
Db	601	DDDLTYQTFLDATTNSNMGFGDKNELIICAESFVSNKEIYIDKIEFIPVOL	652

RESULT 43

US-08-993-722A-44

Sequence 44, Application US/08993722A

Patent No. 6060594

GENERAL INFORMATION:

APPLICANT: English, Leigh H.

APPLICANT: Brussock, Susan M.

APPLICANT: Malvar, Thomas M.

APPLICANT: Bryson, James W.

APPLICANT: Kulesza, Caroline A.

APPLICANT: Walters, Frederick S.

APPLICANT: Slatin, Stephen L.

APPLICANT: Von Terssch, Michael A.

APPLICANT: Romano, Charles

TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED

COLLEOPTERAN-TOXIC CRYSTAL PROTEINS

NUMBER OF SEQUENCES: 113

CORRESPONDENCE ADDRESS:

ADDRESSEE: Arnold, White & Durkee

STREET: P.O. Box 4433

CITY: Houston

STATE: Texas

COUNTRY: USA

ZIP: 77210

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/993,722A

FILING DATE: 18-DEC-1997

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: Kitchell, Barbara S.

REGISTRATION NUMBER: 33,928

REFERENCE/DOCKET NUMBER: MECO:149

TELECOMMUNICATION INFORMATION:

TELEPHONE: 512/418-3106

TELEFAX: 512/474-7577

INFORMATION FOR SEQ ID NO: 44:

SEQUENCE CHARACTERISTICS:

LENGTH: 652 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: protein

US-08-993-722A-44

Query Match 99.8%; Score 3399; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 2.4e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy	1	MNPNNRSEHDTIKVTNPSELQTNHNOYPLADNPNSTLEELNYKEFLRMTEDSSSTEVLNDS	60
Db	1	MNPNNRSEHDTIKVTNPSELQTNHNOYPLADNPNSTLEELNYKEFLRMTEDSSSTEVLNDS	60
Qy	61	TVKDAVGTGIVSVVQILGVVGVPPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
Db	61	TVKDAVGTGIVSVVQILGVVGVPPFAGALTSFYQSFLNTIWPSDADPWKAFMAQVEVLIDK	120
Qy	121	KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRQDRIRRELFSQAESHFRN	180
Db	121	KIEEYAKSKALAELOGLQNNFEDYVNALNSWKKTPLSLRSKRQDRIRRELFSQAESHFRN	180

QY 181 SMPFAVSKFEVLFLPTAAQANTHLLLLKDAQVGEWGYSSDVAEFYHRLKLTQOY 240
DB 181 SMPFAVSKFEVLFLPTAAQANTHLLLLKDAQVGEWGYSSDVAEFYHRLKLTQOY 240
QY 241 TDHCNVNNGVGLRGSTYDAWVFNRRREMTLTVLDLIVLFFPYDIRLYSGVKTEL 300
DB 241 TDHCNVNNGVGLRGSTYDAWVFNRRREMTLTVLDLIVLFFPYDIRLYSGVKTEL 300
QY 301 TRDIFTDFISLNTLQEQPTFLSIENSIRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW 360
DB 301 TRDIFTDFISLNTLQEQPTFLSIENSIRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVETREPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVTYTIANTDVAWPNKGKVLG 420
DB 361 SGNVETREPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVTYTIANTDVAWPNKGKVLG 420
QY 421 VTKVDFSDQDDOKNETSTQYDSKRNNGHVSAQDSIDQLPPETTDEPLEKAYSHQNLV 480
DB 421 VTKVDFSDQDDOKNETSTQYDSKRNNGHVSAQDSIDQLPPETTDEPLEKAYSHQNLV 480
QY 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGGL 540
DB 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGGL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNDFLVIYINKTMK 600
DB 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNDFLVIYINKTMK 600
QY 601 DDDLTQTFDLATTNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVOL 652
DB 601 DDDLTQTFDLATTNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVOL 652

RESULT 44

US-08-993-722A-54
; Sequence 54, Application US/08993722A
; Patent No. 6060594
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Romano, Charles
; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210

COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/993,722A
; FILING DATE: 18-DEC-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577

; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-993-722A-54

Query Match 99.8%; Score 3399; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 2.4e-286; Indels 0; Gaps 0;
Matches 651; Conservative 0; Mismatches 1;

QY 1 MNPNNRSEHDTIKVTPNSELQTNHNPFLADPNPSTLEELNYKEFLRMTESSSTEVLDNS 60
DB 1 MNPNNRSEHDTIKVTPNSELQTNHNPFLADPNPSTLEELNYKEFLRMTESSSTEVLDNS 60
QY 61 TVKDAVGTGISVVGQILGVVGPFPAGALTSPYQSFNTIWFSDADPWKAFVAQVEVLIDK 120
DB 61 TVKDAVGTGISVVGQILGVVGPFPAGALTSPYQSFNTIWFSDADPWKAFVAQVEVLIDK 120
QY 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKTPLSLRKSRSDRIRELFSQAESHPN 180
DB 121 KIEEYAKSKALAELOGLQNNFEDYVNALNSWKTPLSLRKSRSDRIRELFSQAESHPN 180
QY 181 SMPFAVSKFEVLFLPTAAQANTHLLLLKDAQVGEWGYSSDVAEFYHRLKLTQOY 240
DB 181 SMPFAVSKFEVLFLPTAAQANTHLLLLKDAQVGEWGYSSDVAEFYHRLKLTQOY 240
QY 241 TDHCNVNNGVGLRGSTYDAWVFNRRREMTLTVLDLIVLFFPYDIRLYSGVKTEL 300
DB 241 TDHCNVNNGVGLRGSTYDAWVFNRRREMTLTVLDLIVLFFPYDIRLYSGVKTEL 300
QY 301 TRDIFTDFISLNTLQEQPTFLSIENSIRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW 360
DB 301 TRDIFTDFISLNTLQEQPTFLSIENSIRKPHLFDYLOGIEFHTRLQPGYFGKDSFNW 360
QY 361 SGNVETREPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVTYTIANTDVAWPNKGKVLG 420
DB 361 SGNVETREPSIGSSKTIITSPFYGDKSTPEVQKLSFDGQKVTYTIANTDVAWPNKGKVLG 420
QY 421 VTKVDFSDQDDOKNETSTQYDSKRNNGHVSAQDSIDQLPPETTDEPLEKAYSHQNLV 480
DB 421 VTKVDFSDQDDOKNETSTQYDSKRNNGHVSAQDSIDQLPPETTDEPLEKAYSHQNLV 480
QY 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGGL 540
DB 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAETITQLPVVKAYALSSGASIIIEGPGFTGGL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNDFLVIYINKTMK 600
DB 541 LFLKSSNSIAKFKVTLNSAALLQRYRIRYASTTNLRLFVQNSNDFLVIYINKTMK 600
QY 601 DDDLTQTFDLATTNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVOL 652
DB 601 DDDLTQTFDLATTNSNMFGSGDKNELIIGAESFVSNKIIYIDKIEFIPVOL 652

RESULT 45

US-08-993-170A-44
; Sequence 44, Application US/08993170A
; Patent No. 6063597
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO
; TITLE OF INVENTION: COLEOPTERAN INSECTS
; NUMBER OF SEQUENCES: 113

Db	541	LFLKSSNSIAKPKVTLSAALLQRYVRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK	600
Qy	601	DDDLTYQTDFDLATNSNMGFGDGKNELIIGABSFVSNEKIYIDKIEFIPVQL	652
Db	601	DDDLTYQTDFDLATNSNMGFGDGKNELIIGABSFVSNEKIYIDKIEFIPVQL	652
<p>RESULT 46</p> <p>US-08-993-170A-54</p> <p>Sequence 54, Application US/08993170A</p> <p>Patent No. 6063597</p> <p>GENERAL INFORMATION:</p> <p>APPLICANT: English, Leigh H.</p> <p>APPLICANT: Brussock, Susan M.</p> <p>APPLICANT: Malvar, Thomas M.</p> <p>APPLICANT: Bryson, James W.</p> <p>APPLICANT: Kulesza, Caroline A.</p> <p>APPLICANT: Walters, Frederick S.</p> <p>APPLICANT: Slatin, Stephen L.</p> <p>APPLICANT: Von Tersch, Michael A.</p> <p>TITLE OF INVENTION: POLYPEPTIDE COMPOSITIONS TOXIC TO</p> <p>NUMBER OF SEQUENCES: 113</p> <p>CORRESPONDENCE ADDRESS:</p> <p>ADDRESSEE: Arnold, White & Durkee</p> <p>STREET: P.O. Box 4433</p> <p>CITY: Houston</p> <p>STATE: Texas</p> <p>COUNTRY: USA</p> <p>ZIP: 77210</p> <p>COMPUTER READABLE FORM:</p> <p>MEDIUM TYPE: Floppy disk</p> <p>COMPUTER: IBM PC compatible</p> <p>OPERATING SYSTEM: PC-DOS/MS-DOS</p> <p>SOFTWARE: PatentIn Release #1.0, Version #1.30</p> <p>CURRENT APPLICATION DATA:</p> <p>APPLICATION NUMBER: US/08/993,170A</p> <p>FILING DATE: 18-DEC-1997</p> <p>CLASSIFICATION: 424</p> <p>ATTORNEY/AGENT INFORMATION:</p> <p>NAME: Kitchell, Barbara S.</p> <p>REGISTRATION NUMBER: 33,928</p> <p>REFERENCE/DOCKET NUMBER: MECO:002</p> <p>TELECOMMUNICATION INFORMATION:</p> <p>TELEPHONE: 512/418-3000</p> <p>TELEFAX: 512/474-7577</p> <p>INFORMATION FOR SEQ ID NO: 54:</p> <p>SEQUENCE CHARACTERISTICS:</p> <p>LENGTH: 652 amino acids</p> <p>TYPE: amino acid</p> <p>TOPOLOGY: linear</p> <p>MOLECULE TYPE: protein</p> <p>US-08-993-170A-54</p> <p>Query Match 99.8%; Score 3399; DB 3; Length 652;</p> <p>Best Local Similarity 99.8%; Pred. No. 2.4e-286;</p> <p>Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;</p>			
Qy	1	MNPNNRSEHDTTKVTNPSELQTNHNOYPLADNPNTLSELNYKEFLRMTESSSTEVLDS	60
Db	1	MNPNNRSEHDTTKVTNPSELQTNHNOYPLADNPNTLSELNYKEFLRMTESSSTEVLDS	60
Qy	61	TVKDAVGTGIVGVGQILGVGVPPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK	120
Db	61	TVKDAVGTGIVGVGQILGVGVPPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK	120
Qy	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN	180
Db	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN	180
Qy	181	SNPSPAVSKFEVLFLPTTAAQANTHLLLLKDAQVFGEEWGYSSSEDVAFYHRQLKLTQOY	240
Db	181	SNPSPAVSKFEVLFLPTTAAQANTHLLLLKDAQVFGEEWGYSSSEDVAFYHRQLKLTQOY	240
Qy	61	TVKDAVGTGIVGVGQILGVGVPPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK	120
Db	61	TVKDAVGTGIVGVGQILGVGVPPFAGALTSFYQSFLNTIWPSSDADPWKAFMAQVEVLIDK	120
Qy	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN	180
Db	121	KIEEYAKSKALAEQLQNNFEDYVNALNSWKKTPLSLRSKRSQDRIRELFSQAESHFRN	180
Qy	181	SNPSPAVSKFEVLFLPTTAAQANTHLLLLKDAQVFGEEWGYSSSEDVAFYHRQLKLTQOY	240
Db	181	SNPSPAVSKFEVLFLPTTAAQANTHLLLLKDAQVFGEEWGYSSSEDVAFYHRQLKLTQOY	240
Qy	241	TDHCNVNNGVGLRGSTYDAWKNFRFRREMTLTVDLIVLPFFYDIRLYSGVKTEL	300
Db	241	TDHCNVNNGVGLRGSTYDAWKNFRFRREMTLTVDLIVLPFFYDIRLYSGVKTEL	300
Qy	301	TRDIFTDPIFSLNTLOEYGFTELSIENSRKPHLFDYLQIEFHTRLQPGYFGKDSFNW	360
Db	301	TRDIFTDPIFSLNTLOEYGFTELSIENSRKPHLFDYLQIEFHTRLQPGYFGKDSFNW	360
Qy	361	SGNYVETRPSIGSSKTTSPFYGDKSTBPVKLSFDGQKVTRTTANTDVAAMPNGKYYLG	420
Db	361	SGNYVETRPSIGSSKTTSPFYGDKSTBPVKLSFDGQKVTRTTANTDVAAMPNGKYYLG	420
Qy	421	VTKVDFSQYDDQKNETSTQYDSKRNNGHVSQAQSDIDQLPPTTDEPLEKAYSHQNYAE	480
Db	421	VTKVDFSQYDDQKNETSTQYDSKRNNGHVSQAQSDIDQLPPTTDEPLEKAYSHQNYAE	480
Qy	481	CFLMQDRRTGTPFFTWTHRSVDFFNTIDAEKITQLPVVKAYALSSGASIEGPGFTGNNL	540
Db	481	CFLMQDRRTGTPFFTWTHRSVDFFNTIDAEKITQLPVVKAYALSSGASIEGPGFTGNNL	540
Qy	541	LFLKSSNSIAKPKVTLSAALLQRYVRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK	600

STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 18-DEC-1997
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:150
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3000
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 54:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-993-7758-54

Query Match 99.8%; Score 3399; DB 3; Length 652;
Best Local Similarity 99.8%; Pred. No. 2.4e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTPNSELQTNHNOYPLADNPNTLEELNYKEFLRMTEDSSSTEVLNDS 60
Db 1 MNPNNRSEHDTIKVTPNSELQTNHNOYPLADNPNTLEELNYKEFLRMTEDSSSTEVLNDS 60

Qy 61 TVKDAVGTGIVGVGQILGVVGPAGALTSFYOSFLNTIWPSPADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVGVGQILGVVGPAGALTSFYOSFLNTIWPSPADPWKAFMAQVEVLIDK 120

Qy 121 KIEEYAKSKALAEQLQNNFEDVYNALNSWKKTPLSLRSKRSQDRIRLPSQAESHFRN 180
Db 121 KIEEYAKSKALAEQLQNNFEDVYNALNSWKKTPLSLRSKRSQDRIRLPSQAESHFRN 180

Qy 181 SMPFSAVSKFEVLFLPTYAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240
Db 181 SMPFSAVSKFEVLFLPTYAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240

Qy 241 TDHCVNWNVGLNGLRGSTYDAWKFNRRPREMTLVLDLIVLPPFYDIRLYSGVKTEL 300
Db 241 TDHCVNWNVGLNGLRGSTYDAWKFNRRPREMTLVLDLIVLPPFYDIRLYSGVKTEL 300

Qy 301 TRDIFTDPIFLNTLQEGYPTFLSIENSIRKPHLDYLOGIEFHTLQPCYFGKDSFNW 360
Db 301 TRDIFTDPIFLNTLQEGYPTFLSIENSIRKPHLDYLOGIEFHTLQPCYFGKDSFNW 360

Qy 361 SGNVETRPSIGSKTITSPPYGDKSTPEVQKLSFDGQKYVRIANTDVAWPNKGYLG 420
Db 361 SGNVETRPSIGSKTITSPPYGDKSTPEVQKLSFDGQKYVRIANTDVAWPNKGYLG 420

Qy 421 VTKVDSQYDDQKNETSTQYDSKRNNHVSAGDSIDLPPETTDPLEKAYSHQNLAYE 480
Db 421 VTKVDSQYDDQKNETSTQYDSKRNNHVSAGDSIDLPPETTDPLEKAYSHQNLAYE 480

Qy 481 CFLMQDRRGITPFTWTHRSVDFNTIDAETITQLPVKAYALSSGASIIIEGPGTGGNL 540
Db 481 CFLMQDRRGITPFTWTHRSVDFNTIDAETITQLPVKAYALSSGASIIIEGPGTGGNL 540

Qy 541 LFLKESNSIAKFKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMK 600
Db 541 LFLKESNSIAKFKVTLNSAALLQRYVRIRYASTTNLRLFVQNSNNDFLVIYINKTMK 600

Qy 601 DDILTYYQTFDLATNSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVQL 652
Db 601 DDILTYYQTFDLATNSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVQL 652

Db 601 DDILTYYQTFDLATNSNMGFSGDKNELIIGAESFVSNKEIYIDKIEFIPVQL 652

RESULT 49
US-09-427-770-44
Sequence 44, Application US/09427770
Patent No. 6620988
GENERAL INFORMATION:
APPLICANT: English, Leigh H.
APPLICANT: Brussock, Susan M.
APPLICANT: Malvar, Thomas M.
APPLICANT: Bryson, James W.
APPLICANT: Kulesza, Caroline A.
APPLICANT: Walters, Frederick S.
APPLICANT: Slatin, Stephen L.
APPLICANT: Von Tersch, Michael A.
APPLICANT: Romano, Charles
TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
NUMBER OF SEQUENCES: 113
CORRESPONDENCE ADDRESS:
ADDRESSEE: Arnold, White & Durkee
STREET: P.O. Box 4433
CITY: Houston
STATE: Texas
COUNTRY: USA
ZIP: 77210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/427,770
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/993,722
FILING DATE: 18-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Kitchell, Barbara S.
REGISTRATION NUMBER: 33,928
REFERENCE/DOCKET NUMBER: MECO:149
TELECOMMUNICATION INFORMATION:
TELEPHONE: 512/418-3106
TELEFAX: 512/474-7577
INFORMATION FOR SEQ ID NO: 44:
SEQUENCE CHARACTERISTICS:
LENGTH: 652 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-09-427-770-44

Query Match 99.8%; Score 3399; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 2.4e-286;
Matches 651; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MNPNNRSEHDTIKVTPNSELQTNHNOYPLADNPNTLEELNYKEFLRMTEDSSSTEVLNDS 60
Db 1 MNPNNRSEHDTIKVTPNSELQTNHNOYPLADNPNTLEELNYKEFLRMTEDSSSTEVLNDS 60

Qy 61 TVKDAVGTGIVGVGQILGVVGPAGALTSFYOSFLNTIWPSPADPWKAFMAQVEVLIDK 120
Db 61 TVKDAVGTGIVGVGQILGVVGPAGALTSFYOSFLNTIWPSPADPWKAFMAQVEVLIDK 120

Qy 121 KIEEYAKSKALAEQLQNNFEDVYNALNSWKKTPLSLRSKRSQDRIRLPSQAESHFRN 180
Db 121 KIEEYAKSKALAEQLQNNFEDVYNALNSWKKTPLSLRSKRSQDRIRLPSQAESHFRN 180

Qy 181 SMPFSAVSKFEVLFLPTYAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240
Db 181 SMPFSAVSKFEVLFLPTYAQAANTHLLLLKDAQVFGEEWGYSSDVAEFYHROLKLTQY 240

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QY 241 TDHCNWNVNGLGRGSGTYDAWVKFNPRREMTLTVLDDLVLFPFYDIRLYSGVKTEL 300
DB 241 TDHCNWNVNGLGRGSGTYDAWVKFNPRREMTLTVLDDLVLFPFYDIRLYSGVKTEL 300
QY 301 TRDIFTDPIFSLNTLQEGVPTFLSIRKPHLFDYLGQIEFHTRLQPGYFGKDSFNYW 360
DB 301 TRDIFTDPIFSLNTLQEGVPTFLSIRKPHLFDYLGQIEFHTRLQPGYFGKDSFNYW 360
QY 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVKLSFGDKQKVRRTIANTDVAAPNGKVYLG 420
DB 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVKLSFGDKQKVRRTIANTDVAAPNGKVYLG 420
QY 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPPTTDEPLEKAYSHQINVAE 480
DB 421 VTKVDFSQYDDQKNETSTQTYDSKRNNGHVSAQDSIDQLPPTTDEPLEKAYSHQINVAE 480
QY 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGGNL 540
DB 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGGNL 540
QY 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600
DB 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600
QY 601 DDLLTYQTQFDLATTNSNMGFSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652
DB 601 DDLLTYQTQFDLATTNSNMGFSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652
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RESULT 50

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US-09-427-770-54
; Sequence 54, Application US/09427770
; Patent No. 6620988
; GENERAL INFORMATION:
; APPLICANT: English, Leigh H.
; APPLICANT: Brussock, Susan M.
; APPLICANT: Malvar, Thomas M.
; APPLICANT: Bryson, James W.
; APPLICANT: Kulesza, Caroline A.
; APPLICANT: Walters, Frederick S.
; APPLICANT: Slatin, Stephen L.
; APPLICANT: Von Tersch, Michael A.
; APPLICANT: Romano, Charles
; TITLE OF INVENTION: NUCLEIC ACID SEGMENTS ENCODING MODIFIED
; TITLE OF INVENTION: COLEOPTERAN-TOXIC CRYSTAL PROTEINS
; NUMBER OF SEQUENCES: 113
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Arnold, White & Durkee
; STREET: P.O. Box 4433
; CITY: Houston
; STATE: Texas
; COUNTRY: USA
; ZIP: 77210
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/427,770
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/993,722
; FILING DATE: 18-DEC-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Kitchell, Barbara S.
; REGISTRATION NUMBER: 33,928
; REFERENCE/DOCKET NUMBER: MECO:149
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 512/418-3106
; TELEFAX: 512/474-7577
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; INFORMATION FOR SEQ ID NO: 54:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 652 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-09-427-770-54
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Query Match 99.8%; Score 3399; DB 4; Length 652;
Best Local Similarity 99.8%; Pred. No. 2.4e-286; Indels 0; Gaps 0;
Matches 651; Conservative 0; Mismatches 1;
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QY 1 MNPNNRSHDITKVTNPSELQTNHQYPLADNPSTLEELNYKFLRMTDSSSTEVLNLS 60
DB 1 MNPNNRSHDITKVTNPSELQTNHQYPLADNPSTLEELNYKFLRMTDSSSTEVLNLS 60
QY 61 TVKDAVGTGISVVGQILGVGVPPFAGALTSTSYQSFPLNTIPSDADDPWKAFAQVEVLIDK 120
DB 61 TVKDAVGTGISVVGQILGVGVPPFAGALTSTSYQSFPLNTIPSDADDPWKAFAQVEVLIDK 120
QY 121 KIEEYAKSKALAELOGLONNFEEDYVNALNSWKKTPLSLRSKRSODRIRELFSAQESHFRN 180
DB 121 KIEEYAKSKALAELOGLONNFEEDYVNALNSWKKTPLSLRSKRSODRIRELFSAQESHFRN 180
QY 181 SMPSPFAVSKEFVLFPTYAQAAANTHLLLLKDAQVFGEEGYSSSEDAEFYHRQLKLTQOY 240
DB 181 SMPSPFAVSKEFVLFPTYAQAAANTHLLLLKDAQVFGEEGYSSSEDAEFYHRQLKLTQOY 240
QY 241 TDHCNWNVNGLGRGSGTYDAWVKFNPRREMTLTVLDDLVLFPFYDIRLYSGVKTEL 300
DB 241 TDHCNWNVNGLGRGSGTYDAWVKFNPRREMTLTVLDDLVLFPFYDIRLYSGVKTEL 300
QY 301 TRDIFTDPIFSLNTLQEGVPTFLSIRKPHLFDYLGQIEFHTRLQPGYFGKDSFNYW 360
DB 301 TRDIFTDPIFSLNTLQEGVPTFLSIRKPHLFDYLGQIEFHTRLQPGYFGKDSFNYW 360
QY 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVKLSFGDKQKVRRTIANTDVAAPNGKVYLG 420
DB 361 SGNVETRPSIGSSKTIITSPFYGDKSTPEVKLSFGDKQKVRRTIANTDVAAPNGKVYLG 420
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DB 481 CFLMDRRGTIPFFTWTHRSVDFNTIDAEKITQLPVVKAYALSSGASIIIEGPGFTGGNL 540
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DB 541 LFLKSSNSIAKFKVTLNSAALLQRYRVRIRYASTTNLRLFVQNSNNDPLVIYINKTNWK 600
QY 601 DDLLTYQTQFDLATTNSNMGFSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652
DB 601 DDLLTYQTQFDLATTNSNMGFSGDKNELIIGAESFVSNKIIYIDKIEFIPVQL 652
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Job time : 50 secs